

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. XIII. No. 12.
WEEKLY.

BALTIMORE, APRIL 28, 1888.

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Report of the AQUEDUCT Commissioners.

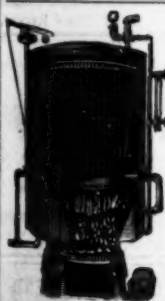
[NEW CROTON AQUEDUCT, NEW YORK.]

AN ELABORATE VOLUME, CONTAINING AUTHORITATIVE TABLES BY THE CHIEF ENG. B. S. CHURCH. JUST ISSUED.

PLANT (by actual count from Table 12.)
Number of Ingersoll Drills used..... 249
Number of Drills of all other kinds used..... 103
PROGRESS (by actual figures from Table 8.)
Average weekly progress in best 10 headings that used Ingersoll Drills exclusively (omitting all idle weeks)..... 38.72 ft.
Average weekly progress in best 10 headings that used other drills exclusively (omitting all idle weeks)..... 31.68 ft.
DIFFERENCE OF 30 PER CENT. IN FAVOR OF INGERSOLL DRILLS.

All headings where Ingersoll Drills were used exclusively have been completed, except the section under Harlem River, now being driven by Ingersoll Drills and Air Compressors. Send for description of Aqueduct, with Engineers' Tables of Progress and Catalogue. Sent free. We have procured a limited number of the Report of the Aqueduct Commissioners, and will send them by express on receipt of \$5, actual cost to us.

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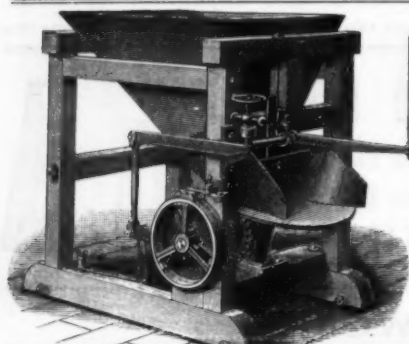


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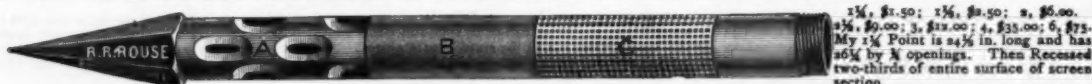
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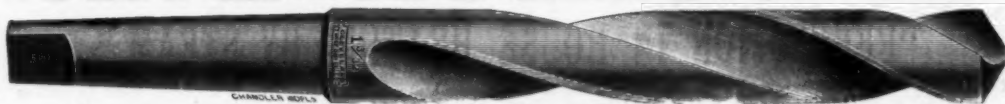
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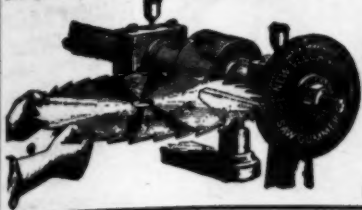
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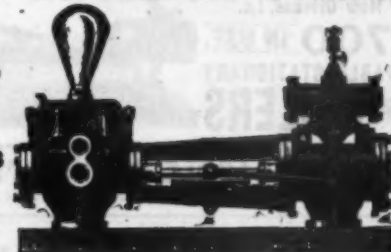
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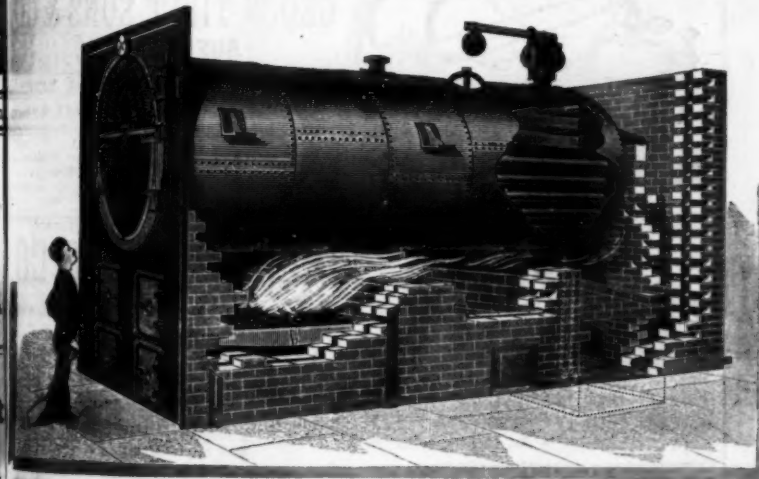
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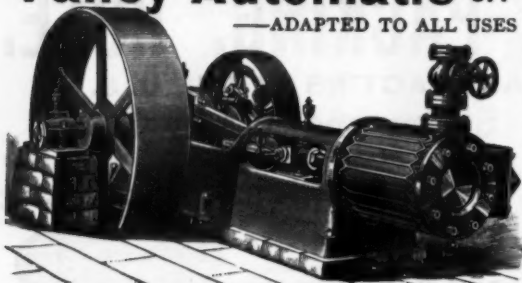


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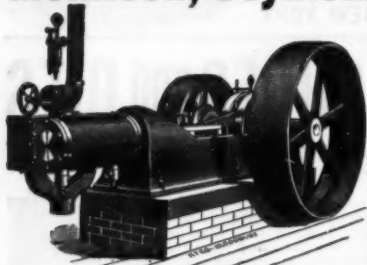
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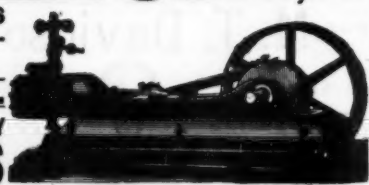
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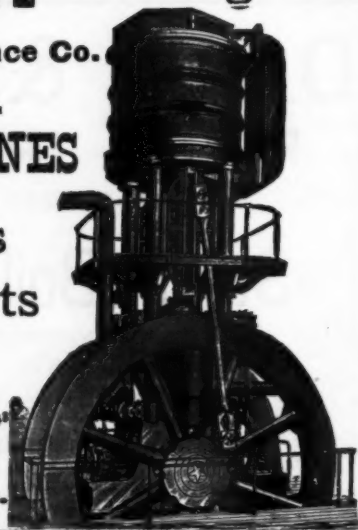
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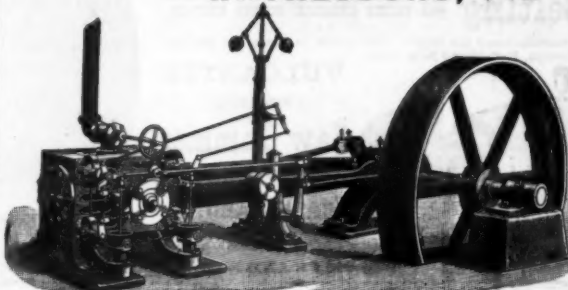
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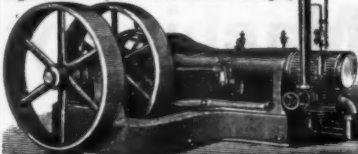
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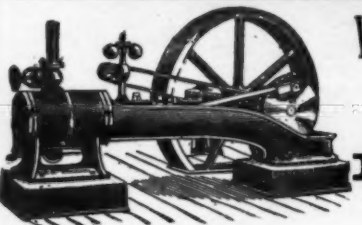
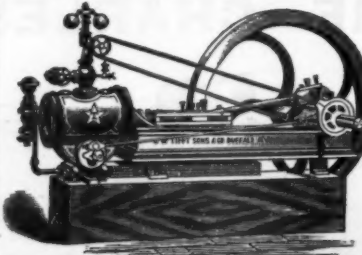
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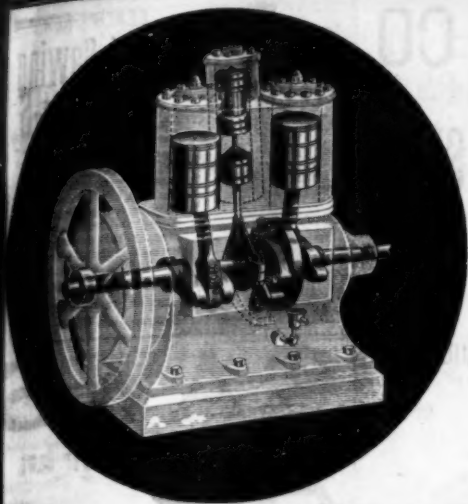
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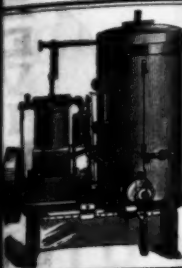
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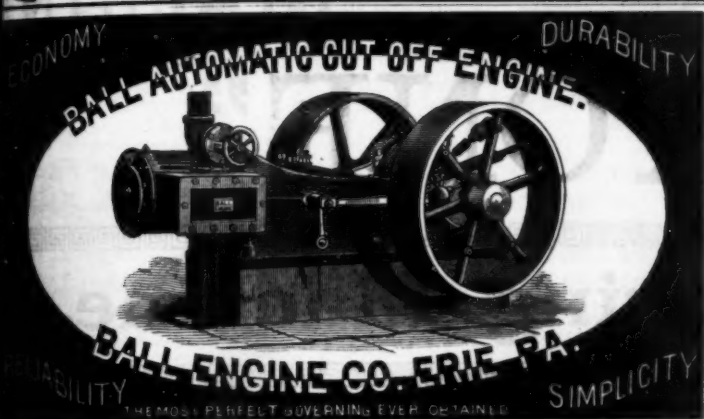
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Acme Automatic Engine, With BRYANT'S Patent Safety Boiler.

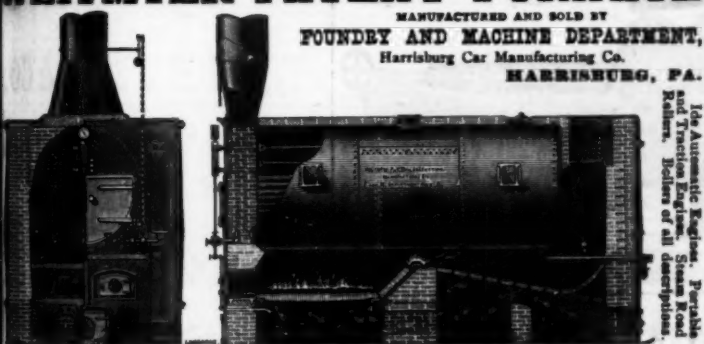
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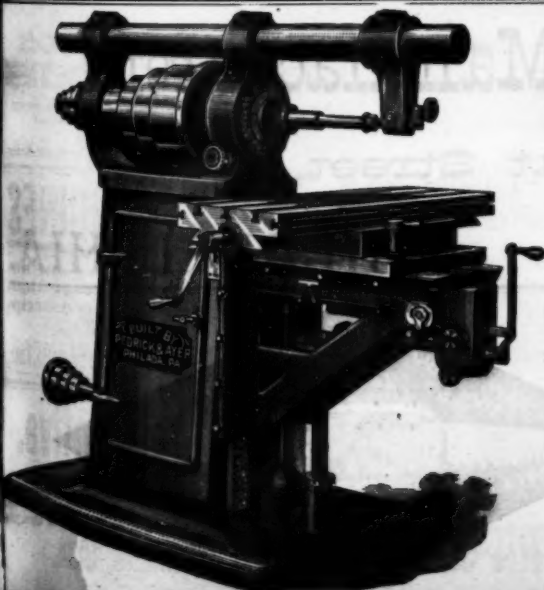


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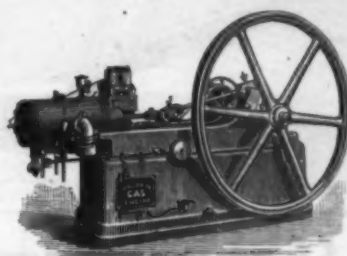


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FULL LINE OF
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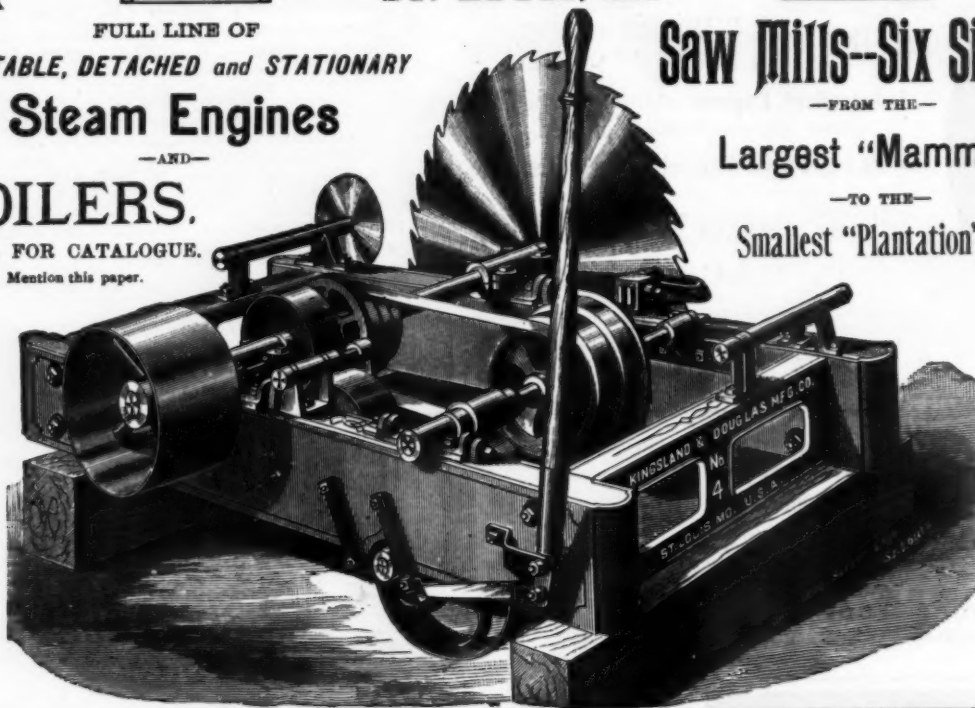
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—AND—

BOILERS.

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Largest "Mammoth"

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SAWS

Inserted Point Edger Saw.

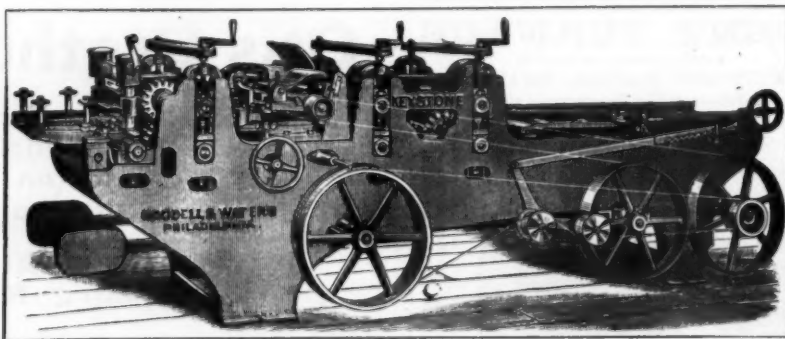


Inserted Point Board Saw.

MACHINE

"KEYSTONE"

Rapid Feed Flooring Machine.



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WESTERN WAREROOMS:

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MR. C. L. RICE, MANAGER.

3002 Chestnut Street,

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Veneer Machinery for Furniture Factories, Etc.



Rotary-Cutting Veneer Machines.

Strong, Solid, Durable, Accurately Made, Double Drivers, Positive Feed, Complete Adjustment, Automatic Change of Pitch. Correspondence solicited.

COE & WILKES,

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Subscribe to the Manufacturers' Record.



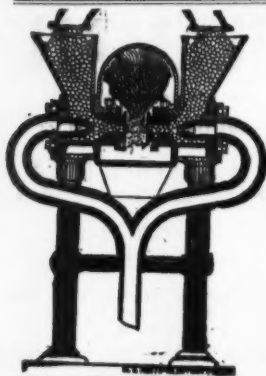


Stedman's Improved Disintegrator and Pulverizer.

This Mill will disintegrate or pulverize materials of all kinds, for brick and tile, for cement and fire brick, and slag from open air furnaces for use in rolling mills, and materials for foundry facings, iron ores, animal matter in almost all conditions,—in fact almost any material that can be disintegrated. It is an improvement over any yet made and the result of practical experience.

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STEDMAN'S
Foundry & Machine Works,
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Sectional View of Pulverizer.

PNEUMATIC PULVERIZER.

The principle of pulverization consists in the employment of

TWO POWERFUL OPPOSING CURRENTS

of dry super-heated steam, so arranged that they continuously charge themselves with crushed or granulated material, and by the great force and velocity of the steam currents the minerals are dashed against each other with such power of concussion as to cause the hardest ores to be pulverized to any degree of fineness desired. The high temperature of the super-heated steam currents employed, through which every minute particle of ore must pass, causes them to become very hot and dry, which produces a beneficial effect upon Sulphurets and ores containing rusty Gold. The light weight and simplicity of construction of the Pulverizer, the extremely small and inexpensive wearing parts are the WONDER and SURPRISE of all who witness its operation. The Company are prepared to furnish complete plants for pulverizing

10 to 200 Tons Per Day,

including a Sectional Steam Boiler supplying all the power required.

PNEUMATIC PULVERIZER COMPANY,

2 and 4 Stone Street, New York.

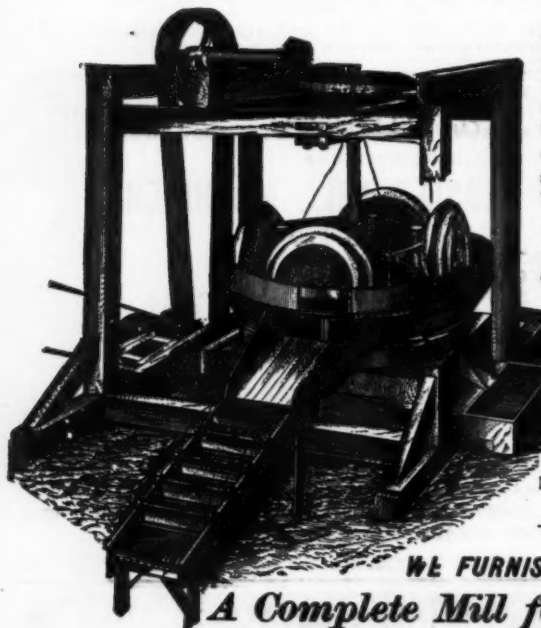
L. F. HOLMAN, Pres.

F. A. LUCKENBACH, Supt.

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Ore Pulverizer and Amalgamator COMBINED.



The following testimonial from Mr. Marsden, of the firm of Farrell & Marsden, manufacturers of stone-breakers & ore-crushers, Ansonia, Conn., speaks volumes for the Wiswell Mill:

Wiswell Electric Mining Machinery Co.:

GENTLEMEN: After carefully inspecting your mill and seeing it in operation, I do not hesitate to say that it is one of the best, if not the best pulverizer and most complete gold saving machine I have ever seen.

Please accept congratulations for your success.
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WE FURNISH

A Complete Mill for \$2,500.

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Electric Mining Machinery Company,

A. A. REEVE, Treas.

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M. C. BULLOCK MFG. CO.

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Lane's Patent Band Friction Hoisting Machinery,

FOR MINES, BLAST FURNACES, DOCKS, ETC.

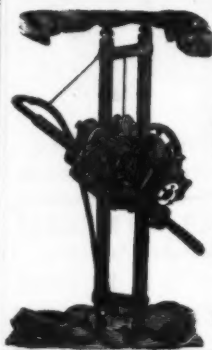
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Winding Engines,
Furnace Hoists,
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(With or without Boilers.)

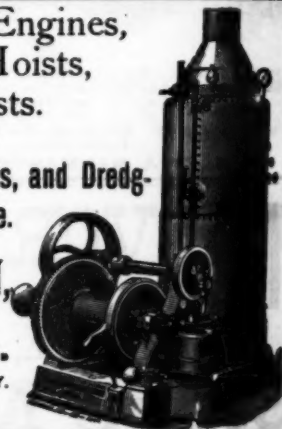
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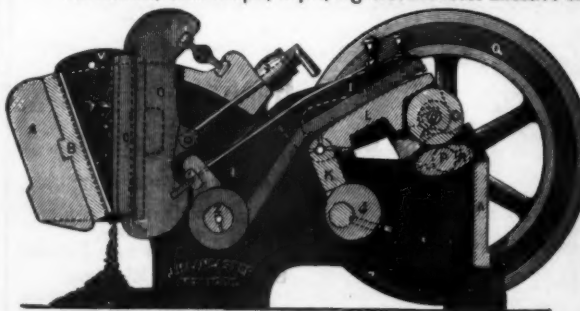
535 Arch Street, Philada.

References: { Croton Magnetic Iron Mines, Brewster's, N. Y.
Crown Point Iron Co., Crown Point, N. Y.
Belvidere Iron Co., 2nd Broadway, N. Y.
San Island Chemical Co., Rochester, N. Y.



The "LANCASTER" ROCK BREAKER AND ORE CRUSHER,

The Newest, Most Simple, Rapid, Lightest and Most Effective Crusher Extant.



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Screens, Elevators and Conveyors. Address

JAS. H. LANCASTER, 187 Broadway, New York.

Sole Maker of the "Lancaster" Hand and Power Coal Wedging and Coal Drilling Machines

Subscribe to the MANUFACTURERS' RECORD.

Adjustable while running to yield any uniform grades of product.
Less power required and less liability to breakage, and less cost and in subsequent wear and tear, than any other machine for which such advantages are being either attempted or claimed.
Competitive trials and tests solicited.
The "Lancaster" Crushers may be mounted on wheels, worked by hand, horse-gear, steam or other power, and also fitted with Rotary

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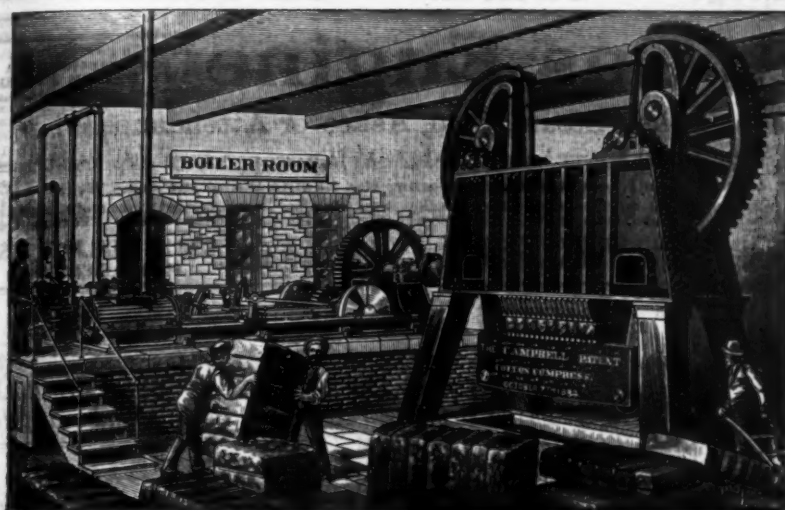
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OPENERS, LAPPERS, ROLLER AND REVOLVING FLAT CARDS, DRAWING FRAMES (over 17,000 Deliveries, Working with Electric Stop Motion), SLUBBING, ROVING, SPINNING FRAMES AND MULES, WARPERS, SLASHERS, Etc., Etc.

Needle Pointed Tempered Steel **CARD CLOTHING.**
READY GROUND

A Great Success. TRY IT! Over 70 New England Mills now using it. Cuts, Descriptive Circulars, Estimates, Etc., on request.

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Sole Manufacturers of the

CAMPBELL COTTON COMPRESS.

Undoubtedly the Most Desirable Compress Made.

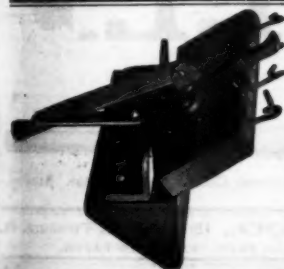
It is the cheapest to install, costing only half the price of other makes.
It is the cheapest to run, requiring least fuel, attention and repairs.
It is the only compress profitable for a small market, as it can be run on small lots at a profit, where other compresses could be operated only at a loss.
It is therefore the only compress profitable for the interior, as it will earn a good profit with 25,000 bales or less, while it has a capacity of 40,000 to 50,000 bales per season.
It is put up under the fullest guarantee.

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The Campbell Cotton Compress Co.

Offices, 59 and 61 Walnut Street, * CINCINNATI, O., U. S. A.

LOWELL CARD CO.
CARD CLOTHING of Every Description,
Set With Round, Angular, Double-Convex Iron or Steel Wire.
LOWELL, MASS.



WALMSLEY'S DEVICE

For Raising and Supporting the Guide Board or Ring Frames and Twisters. In Fall River alone it is used on over 400,000 spindles, or 97 per cent. of all the ring frame spindles in the city. Outside of Fall River its use is scattered from Maine to Delaware, over 400,000 more. Anyone can put them on, being very simple, and its cost nominal.

For prices and information please address

R. WALMSLEY, FALL RIVER, MASS.

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BROWN & KING, MANUFACTURERS OF
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Roller Covering, Loom Pickers and Strapping.

Dealers in Roller Coverers, Stock and Tools; Cotton and Woolen Mill Supplies

Full Line "Hick's" United States Standard Ring Travelers, Mill Wire Goods Spring Cotters, Belt Hooks, Lacing, &c., kept constantly on hand.

Wrought Iron Pipe Fittings and Brass Goods. Southern Agents for the celebrated "B. C. & D. Oak Tanned Patent Lap Belting, Galvin Compound Wedge Gate Valve, Imhäuser's Watchman Time Detectors, Diamond Emery Wheel Machine Co., &c.

Office and Salesroom, No. 62 S. Broad Street. ATLANTA, GA.

Patent Needle Pointed **CARD CLOTHING,**
Hardened and Tempered Steel Wire
For COTTON and WOOLEN MILLS.
T. K. EARLE MFG. CO. WORCESTER, MASS.
SEND FOR SAMPLE.



Raw Hide Bow Pickers

Our Bow Pickers are made of the best selected English cured stock, and are of more finished workmanship than any other make.

LOOM PICKER CO., Biddeford, Me.

We make all kinds of Raw Hide and Leather Loom Pickers.

COTTON WOOL
Openers Washers and Dryers.
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CHARLES F. TAYLOR,
Patent Machine Paper Cop Tubes.

These Tubes are used in a large number of Looming Mills, including
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Harmony Mills, Cohoes, N. Y.
Utica Steam Cotton Mills, Utica, N. Y.
The New York Mills, New York Mills, N. Y.
Tubes furnished promptly for all makes of spindles, American or foreign. Address
Amoskeag Manufacturing Co., Manchester, N. H.
Pacific Mills, Lawrence, Mass.
Atlantic Cotton Mills, Lawrence, Mass.
Laconia Company, Biddeford, Me.
Bates Manufacturing Co., Lewiston, Me.
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CHARLES F. TAYLOR, 5 Custom House St., Providence, R. I.

Taylor Lever Cotton Compress,

Cylinder 90 inches in Diameter.

We make for the above compress the following claims:

1st.—The most POWERFUL Compress in the world. 2d.—The STRONGEST. 3d.—The most SIMPLE, consequently the least liable to get out of order. 4th.—The most ECONOMICAL, effecting a saving of from 30 to 50 per cent. in fuel. 5th.—It will compress as many, if not more, bales per day, as any other compress. 6th.—It is far the cheapest of any first-class Compress on the market. This machine is fully warranted to do the work as represented. Correspondence solicited. Address

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WHITINSVILLE SPINNING RING CO.

WHITINSVILLE MASS. U.S.A.

MANUFACTURERS OF SUPERIOR SPINNING AND TWISTER RINGS.

The DEANE STEAM PUMP CO.

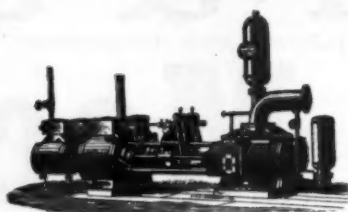
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STEAM * PUMPING * MACHINERY

OF EVERY VARIETY.

Send for New Catalogue No. 22.



The DEANE STEAM PUMP CO.

NEW YORK, BOSTON,

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MAKE A SPECIALTY OF

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FOR THE SUPPLY OF CITIES AND TOWNS.

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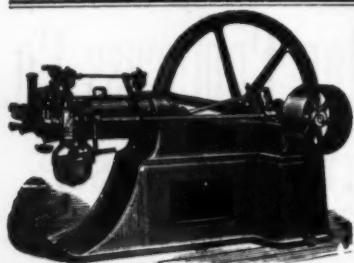
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SMITH & COURTNEY, Richmond, Va.

MECKLENBURG IRON WORKS, Charlotte, N. C.

E. V. WHITE & CO., Norfolk, Va.

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Over 18,000 in Use.

Otto Gas Engine

30 to 70 per ct. less Gas consumption than ANY OTHER ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

Guaranteed to Consume 25 to 75 Per Cent. less Gas than any other Gas Engine Doing the same Work.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. Sizes: 1 to 25-Horse power.

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OTTO GAS ENGINE WORKS, Schleicher, Schumm & Co. 33d & WALNUT STS. PHILADELPHIA.

WE MANUFACTURE

Automatic Sprinklers,
Roving Frames,
Rabbeth, Sherman, } Spindles,
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Double Adjustable Spinning Rings,
Twisters, Spoolers, Reels,
Spooler-Guides,
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Banding Machines,Slasher } Warpers,
Chain }
Warper } Creels and Beams,
Reeds and Combs,
Stop Motions & Clocks,
Balling Machines,
Slasher Cut-Markers,
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Sharples,Lever Screws for Roving and
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Cleaners, Traveller Brushes.
Temples { Dutcher, } With Latest
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Shuttle Guards, Durkin's
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Oil Can, Belt Hole Guards.Milled Machine Screws,
Special Milled Work
of all kinds, etc., etc.

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For Spindles, Temples and all
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at short notice.

Send for Prices.

GEORGE DRAPER & SONS, HOPEDALE, MASS.

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FRICTION DRILL

Tested Four Years Before Placing on the Market. Superseding the Ratchet.

Machinists, Boiler Makers, Mechanics and all parties having use for a Ratchet will find this Drill a great saving of time. Can be used in contracted places where a Ratchet cannot. Send for Illustrated Circular and Price List. Mention Paper.

F. F. WATERS MANF'G CO.

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Smith's Patent. Patented June 5, 1883.

Instantaneous Clutch. No Lost Motion. Reliability.

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SECTIONAL AND PLASTIC. PAMPHLET AND SAMPLES FREE. NAME THIS PAPER.YORK
IMPROVED

Turbine Water Wheels.

Automatic Eng's.
Yacht Engines.
Factory Engines.

—Flour Mill, Dredging and Saw Mill Machinery.—

Shafting, Pulleys, Hangers, Couplings,

—BOXES AND GEARING.—

Engines and Boilers
OF ALL KINDS AND FOR EVERY DUTY.MACHINERY
OF EVERY DESCRIPTION.YORK MFG. CO.
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ALEXANDER BROWN & SONS, { ESTABLISHED } BALTIMORE. Transact a General Foreign and Domestic Banking Business.

Buy and sell Bills of Exchange on Great Britain, Ireland, and other foreign points. Issue Commercial and Travelers' Credits in Sterling, Francs or Dollars, available in any part of the world. Make Telegraphic Transfers of Money between this and other countries. Make Collections.

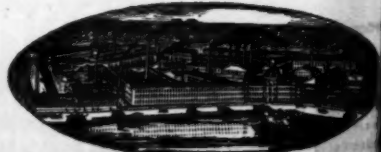
BROWN BROTHERS & CO., New York, Philadelphia and Boston.

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—MAKERS OF IRON AND STEEL—

MANUFACTURERS OF



Iron, Steel and Copper Wire, Wire Rope, Barbed Wire.

Manufacturers' Record.

PUBLISHED EVERY SATURDAY BY THE
MANUFACTURERS' RECORD CO.

R. H. EDMONDS, EDITOR.

—OFFICE—

EXCHANGE PLACE AND COMMERCE STREET
BALTIMORE.

SUBSCRIPTION \$4.00 A YEAR.

BALTIMORE, APRIL 28, 1888.

WHAT ADVERTISERS SAY.

**Fletcher & Thomas, Manufacturers of
All Kinds of Brick-makers'
Supplies.**

INDIANAPOLIS, IND., April 6, 1888.

Editor Manufacturers' Record:
We are happy to say that the direct results from our advertisement in the MANUFACTURERS' RECORD have been very satisfactory. Our trade throughout the South since January 1 has more than doubled that of last year, and very largely we owe this has come from the fact of your paper reaching to all quarters, and directly to those who are looking for improved machinery. Hardly a day passes that we do not receive letters saying "we see by the MANUFACTURERS' RECORD that you have improved brick machinery, etc. etc." We heartily recommend your paper as a medium for reaching the people.
Yours very truly,
FLETCHER & THOMAS.

**F. Adams Co., Manufacturers of
Patent Household Articles.**

ERIE, PA., March 10, 1888.

Editor Manufacturers' Record:
The "ad." we have in your paper we consider one of the best investments we have made this year. We are receiving numerous enquiries from first-class houses, asking for catalogues and best cash prices. This is our second year with you, and we can trace a number of our orders direct to our "ad." in the RECORD. We have tried other papers who claim to reach the trade we are seeking, and have settled on the MANUFACTURERS' RECORD as being superior to all others for Southern trade. Yours truly,
THE F. F. ADAMS CO.

**The A. H. Dolph Co., Manufacturers
of Laundry Machinery.**

CINCINNATI, OHIO, March 31, 1888.

Editor Manufacturers' Record:
We have been advertisers in the MANUFACTURERS' RECORD for some two years, and desire to express our satisfaction with the result to us. We find that your paper brings us inquiries from all points of the South. We also highly appreciate the information forwarded by you of new enterprises in our line of trade.
THE A. M. DOLPH CO.
E. W. MULLIKIN, Sec'y and Treas.

**Cordeman Machine Co.—Wood-
Working Machinery.**

CINCINNATI, O., January 30, 1888.

Editor Manufacturers' Record:
Our "ad." with your journal has been running but one month, but from the solid returns received in this brief time we are constrained to say that in none of our other contracts made to reach the Southern trade have we found the practical results yours has afforded us. Truly yours,
CORDEMAN MACHINE CO.

Ideal Manufacturing Co.

NEW HAVEN, CONN., January 18, 1888.

Editor Manufacturers' Record:
We are very much pleased with the result of our experimental advertisement in the RECORD. We had four issues, every other week, and have received 33 bona fide enquiries from three issues. We may make out contract for one year. Yours truly,
J. H. BARLOW,
Manager Ideal Manufacturing Co.

**F. Waters Manufacturing Co., Manu-
facturers of Smith's Patent
Friction Drill.**

BOSTON, MASS., February 4, 1888.

Editor Manufacturers' Record:
It gives us pleasure to state that our "ad." in the MANUFACTURERS' RECORD has brought us, on the average, about 30 letters per month. We consider it paying investment. Respectfully,
F. F. WATERS MFG. CO.

**Cordeman, Meyer & Co., Manu-
facturers of Wood-Working
Machinery.**

CINCINNATI, O., January 11, 1888.

Editor Manufacturers' Record:
We are highly pleased with the returns from our advertisement in your journal, and take pleasure in recommending it to others in our line as a valuable medium for reaching the trade. Yours very truly,
CORDEMAN, MEYER & CO.

"Pull All Together!"

The graphic description of Oxford's celebration of the opening of its new railroad, which comes from our special correspondent, carries with it a moral of universal application. It illustrates that power of unity and will which is expressed in the sailor's rollicking chorus:

"A long pull, a strong pull, a pull all together."

Here we have the story of a little country hamlet, where people have shaken off the dullness engendered by their surroundings, and, stirred by a common impulse, have concentrated their powers, and are using them harmoniously and effectively for the building up of their town and of all the region round about. This change from the hum drum listlessness of a dead-and-alive village to the stirring elasticity of a prosperous young city has been brought about by the people themselves, and not by strangers and speculators. It is the legitimate outgrowth of unity, energy and determination. When the tobacco planters of Granville attached axles and shafts to a hoghead, harnessed a mule to it, and started it in charge of a negro driver for Richmond or Lynchburg (as was formerly the custom), they only illustrated that uneconomic labor system which was destroyed by the war. When they clubbed together to make Oxford a market town, and then to build railroads over which purchasers could come to it, and tobacco could be shipped from it, they exemplified the spirit of this era.

The generous emulation between Durham, Henderson and Oxford, friendly rivals that they are, inures to the prosperity of all three cities, and of the people of half a dozen counties. It is in glorious contrast to the jealous spirit occasionally displayed, which leads the people of some communities to disparage others, to the detriment of all. The resources of the South are boundless, her natural wealth is unlimited, and she has room and business enough for ten cities for every one that now exists. The MANUFACTURERS' RECORD has no sympathy for or patience with that narrow provincialism which seeks to build up one locality by depreciating another. It is mean and despicable, and invariably reacts upon itself. The lofty mountains, the broad plateaus, the lovely valleys of the South, teeming with natural wealth in a thousand forms, will never reach their highest development until the people of every community imitate the jolly seafarers and "pull all together."

LAST year Gainesville, Ga., built a cotton mill. It has been in operation six months and is just getting into real good working shape, but it has already earned 10 per cent. The Columbia Cotton Mills, of Columbia, Tenn., have declared a 10 per cent. dividend for the year. Cotton mills appear to be paying pretty well this year. Why not build a few more?

Virginia's Good Example.

Some time ago we told of the development of the fruit canning business in Botetourt county, Va., which, commencing with one farmer canning his own fruits in his kitchen, had developed until there are now 12 or 15 factories in successful operation in that county, and as many more preparing to commence work there this spring. Another county in the same State is making rapid progress in the same direction. Rockbridge county will have six new factories this spring, in which \$75,000 to \$100,000 will be invested. Tomatoes, peas, fruits, &c., will be canned, creating a profitable home market for all these products. Not only does the building up of the canning interests keep at home much money that has heretofore gone elsewhere, but it creates a new industry for the farmers. It enables them to diversify their crops; it helps to make the South self-sustaining in all its food requirements, and broadens and deepens the foundations on which its prosperity is being built. What other States are following the Old Dominion's good example? Not content to build furnaces and mine coal alone, nor to let all her energies center in these, she is diversifying her industrial growth and building it up in harmonious proportions, solid and substantial in all its parts.

A Contrast.

A very interesting comparison can be made by contrasting the reports as to the condition of manufactures in the South with those in the North and West as found in the reports of the daily papers:

| SOUTH. | NORTH AND WEST. |
|---|---------------------------------------|
| Furnaces blowing in; new furnaces building. | Furnaces blowing out. |
| New rolling mills starting up. | Rolling mills shutting down. |
| Great activity in iron sections. | Great dullness in iron regions. |
| Factories of all kinds crowded with work. | Dullness. |
| Laborers in demand. | Idle workmen and reductions in wages. |
| No strikes anywhere in the South. | Strikes and lockouts. |
| Opening new mines. | Closing mines. |
| Building new cotton mills, wood-working establishments, &c. | Many complaints of dullness. |
| Great activity in railroad construction and house building. | Blizzards; floods. |
| Hail spring. | Ice. |
| Strawberries. | Snow. |

ON May 15 the Houston Post will issue an edition of 24 pages, devoted to a commercial write-up of the towns of central Texas. It will be a paper that everybody interested in Texas should read. In order to secure a copy orders must be at once addressed to the Post at Houston, accompanied by cash or stamps. Price 10 cents per copy, \$1.00 a dozen, postage prepaid.

IN our last issue we published a letter from Mr. V. H. Kriegshaber, the assistant engineer of the Georgia Central Railroad, in which he stated that "this company has purchased the East Alabama Railroad, and intends extending same from Roanoke to Anniston, Ala.," but Gen. E. P. Alexander, the president of the Central, has since telegraphed us that the direction of the extension of the East Alabama road has not yet been decided.

The Work of Four Years.

At the annual meeting of the Sheffield Coal, Iron & Land Co., Mr. A. H. Moses, in retiring from the position of general manager, which he has filled with such signal ability, gave a review of the work of that company during the four years of its existence. The following extract shows what has been accomplished in that brief time:

When it is considered that this company commenced four years ago to convert an old field into a city, with only enough money subscribed to pay for the site of Sheffield, namely \$50,000, a statement of what has been accomplished appears almost incredible.

It has caused the construction into Sheffield of three railroads, the Louisville & Nashville (N. F. & S. division), the Memphis & Charleston and the Sheffield & Birmingham, and written contracts for the erection here of the principal shops of the three lines have been executed. It has secured the construction or establishment here of five first-class blast furnaces of an aggregate daily capacity of 700 tons of pig iron; a 90-inch Morse steam cotton compress, the best, largest and most powerful made; stove works, plow works, furniture factory, numerous steam brick works, planing mills, wood-working establishments, paint works, bottling works, steam laundry, a first-class steam job printing establishment and daily and weekly newspaper office, an ice factory, free public schools, several churches, two banks, steam water works, an electric light plant for street and house illumination, two hotels and two steam dummy lines. Several additional manufacturing establishments are assured. Three additional lines of railroad have been surveyed to Sheffield, of which two are partly constructed. Several other railroads are almost certain, and a large and commodious hotel, with all modern improvements and first-class in all respects, is now under construction, and plans are now being prepared for a first-class female college, which it is proposed to locate here. Numerous dwelling houses and brick business houses, such as would attract favorable attention in cities of 25,000 or 50,000 population, have been erected. Work on the shops of the Sheffield & Birmingham Railroad has been commenced, and we are assured that the construction of the principal shops of the Memphis & Charleston Railroad Co., which that company is under written contract with this company to locate here, will be commenced during this spring.

THE free trade papers of the South have generally insisted that protection sentiment is not increasing in that section; in fact, they have so vigorously denied it, that one might almost suppose them to be totally blind to what is going on around them. The Charleston (S. C.) News and Courier, however, admits the growth of protection in the South, and in discussing Judge Kelley's tariff speech, said:

In the South, on the other hand, the protection sentiment has developed surprising strength in the same period. Louisiana clamors for the maintenance of the high tariff on sugar, and the Representatives of that State stand with Mr. Kelley to-day on the platform from which he denounces the solid South. Virginia insists on a high tariff on coal and iron, and in this respect is also enlisted under Mr. Kelley's smoky banner. In other Southern States germs of protective feeling are found manifested, and no one has asserted its existence more positively than Mr. Kelley.

Well, yes, the "germs" are pretty well developed in many Southern States besides Louisiana and Virginia.

THE PROSPEROUS SOUTH.

What the Governors and Agricultural Commissioners of the South Say.

FARMERS PROSPERING—DEBTS DECREASING.

A Marked Decrease in Liens and Mortgages.

The Increasing Prosperity of the Agricultural Interests of the Whole South.

GREAT GAINS IN WEALTH.

IMPROVEMENTS IN SCHOOLS.

Not a Single Word of Complaint, but a Bright Picture of the Present Prosperity and the Brilliant Promise of the Future.

Enemies of the South have sought to prove that the prosperity of that section is not general, but is confined to a few manufacturing centers. Those who have carefully investigated the matter know how false this is, but it serves the purpose of those who put it forth. It deceives many and helps to some extent to retard the movement of capital and settlers to that section. Southern agricultural interests are pictured by those who seek to misrepresent the South as in a bad financial way, with the outlook exceedingly gloomy. A few weeks ago the MANUFACTURERS' RECORD took up the statements that have been so industriously circulated that Southern farmers are growing poorer and Southern school advantages declining, and proved by the statistics of the United States census and the Agricultural Department that the South had made a wonderful advance in agriculture in recent years. At the same time we addressed letters to the governors and agricultural commissioners of the Southern States, asking as to the financial condition of the farming interests, whether farm and crop liens and mortgages were increasing or decreasing; whether farmers were becoming more prosperous or were yearly getting deeper in debt; whether labor was efficient; whether public and private schools were receiving increased attention or not, &c. The answers to these questions we present to-day. Without a dissenting voice the farmers are declared to be steadily improving their financial conditions, debts have rapidly decreased, labor-saving implements are yearly becoming more generally used and the present condition of the farmers is better than for many years, with the prospects for the future exceedingly bright. Let us sum up some of the evidences of Southern progress as told by a comparison of the official figures of 1880 and 1887. Starting with the assessed value of

property in 1880 and 1887 we have the following figures:

| Assessed Value of Property. | | |
|-----------------------------|-----------------|-----------------|
| | 1887. | 1880. |
| Alabama..... | \$114,995,869 | \$103,757,073 |
| Arkansas..... | 148,868,000 | 90,511,653 |
| Florida..... | 84,560,564 | 39,574,883 |
| Georgia..... | 341,504,981 | 951,424,651 |
| Kentucky..... | 483,491,650 | 350,563,071 |
| Louisiana..... | 111,925,751 | 177,090,459 |
| Maryland..... | 485,839,779 | 459,187,408 |
| Mississippi..... | 129,887,054 | 110,608,139 |
| North Carolina..... | 210,035,433 | 169,916,907 |
| South Carolina..... | 141,074,000 | 120,351,000 |
| Tennessee..... | 239,000,000 | 811,608,438 |
| Texas..... | 650,412,401 | 312,470,776 |
| Virginia..... | 339,348,723 | 324,955,980 |
| West Virginia..... | 177,341,363 | 146,991,740 |
| Total..... | \$3,858,509,867 | \$2,881,418,597 |

It must be remembered that these figures, representing the assessed value of property reported for taxes, do not by any means fully give the wealth of the States. Assessments in every Southern State are far below the market value of property. Gov. Lowry, of Mississippi, in his last annual message stated that the wealth of that State was fully three times as great as the assessments indicated, and showed how this occurred. In many of the States an immense amount of manufacturing property, as well as other descriptions is exempt from taxes, and hence is not included in these figures. In Alabama, for instance, a specified number of farm animals and a certain amount of agricultural implements are allowed to every farmer without taxation, and hence no record is kept of them. Hon. S. A. Jonas, who writes from Washington upon the condition of Mississippi, explains these points very fully, and shows that in the one item of railroad property alone over \$52,000,000 is not included in the assessments of that State. Over \$25,000,000 have been spent in Mississippi since 1880 in building railroads, and yet none of this is added to the property assessments.

Allowing, however, for all these exemptions there is still shown the enormous increase of \$977,000,000 in the assessed value of Southern property between 1880 and 1887. The increase is in every State.

Taking the amounts expended by the States for public schools, which does not include the amount spent by counties and towns, but simply the State appropriations, we have for the following States:

| | 1887. | 1880. | 1870. |
|---------------------|------------|-----------|-----------|
| Alabama..... | \$ 515,985 | \$395,335 | \$374,670 |
| Florida..... | 449,099 | 140,793 | 59,146 |
| Kentucky..... | 1,095,000 | 808,148 | 393,918 |
| Maryland..... | 509,564 | 504,153 | 393,607 |
| North Carolina..... | 653,037 | 326,037 | 171,497 |
| South Carolina..... | 541,000 | 352,910 | 150,000 |
| Texas..... | 2,300,000 | 983,689 | 529,836 |
| Virginia..... | 1,535,289 | 946,109 | 529,836 |

These eight States spent for public schools \$3,100,000 more in 1887 than in 1880, besides the great increase in the amounts spent by the counties and cities, and, while doing this, private schools and colleges largely increased in number. So that it is very evident that educational matters are receiving much attention.

In this connection with the statements made as to the increasing prosperity of Southern farmers it may be well to repeat the figures given in our issue of March 24, contrasting 1887 and 1879.

The yield of principal crops in the

South in 1879 and 1887, as compiled from the reports of the census and the United States Agricultural Department, was as follows.

| | 1887. | 1879. | Increase. |
|-------------------------|-------------|-------------|-------------|
| Crops..... | 6,800,000 | 5,755,359 | 1,044,641 |
| Corn, bushels, abt..... | 499,415,000 | 333,121,290 | 166,293,710 |
| Wheat, bushels..... | 58,384,000 | 34,476,740 | 23,907,260 |
| Oats, bushels..... | 81,306,000 | 43,476,600 | 37,829,400 |
| Total grain, bus..... | 636,305,000 | 411,074,630 | 225,230,370 |

A comparison of the value of live stock in the South in 1879 and on January 1, 1888, will prove of interest:

| | 1888. | 1879. | Value. |
|----------------------------|---------------|---------------|--------|
| Horses..... | \$91,659,208 | \$127,502,759 | |
| Mules..... | 113,008,770 | 65,699,675 | |
| Milch Cows..... | 68,187,682 | 47,630,990 | |
| Oxen and other cattle..... | 130,741,481 | 87,000,000 | |
| Sheep..... | 15,278,829 | 19,268,888 | |
| Hogs..... | 33,919,580 | 44,935,943 | |
| Total..... | \$573,695,550 | \$391,419,254 | |
| Increase..... | \$182,283,296 | | |

That is a pretty healthy increase in the value of live stock between 1879 and 1888.

The total value of the chief agricultural products of the South (omitting sugar, rice, fruits and vegetables, etc., the value of which is not given in the United States Agricultural Department's reports) for 1887 and 1879 compares as follows:

| | 1887. | 1879. |
|--|---------------|---------------|
| Cotton..... | \$310,000,000 | \$227,803,000 |
| Corn..... | 259,813,530 | 187,058,752 |
| Wheat..... | 49,997,810 | 65,575,378 |
| Oats..... | 34,955,120 | 20,193,011 |
| Potatoes, barley, hay, tobacco, etc..... | 95,000,000 | 60,478,313 |
| Total..... | \$749,866,460 | \$571,098,454 |
| Increase..... | \$178,768,006 | |

If to these figures we add the increase in fruits and vegetables, (Florida alone having developed her great orange and trucking business mainly since 1879) sugar, etc., the total gain in the value of agricultural products of the South in 1887 over 1879 was upwards of \$200,000,000, while during the same time the increase in the value of live stock was, as we have already shown, \$182,283,000.

Now while the South has made this wonderful gain in agriculture, what has been done in manufactures and railroads?

The construction of railroads is an exponent of a country's progress, and by it we may measure the growth made. What has been the railroad construction of the South since 1880? The following figures show:

| | Mileage Jan. 1, '88. | Mileage June 1, '80. |
|---------------------|----------------------|----------------------|
| Alabama..... | 2,361 | 1,786 |
| Arkansas..... | 2,361 | 828 |
| Florida..... | 2,361 | 529 |
| Georgia..... | 3,595 | 2,433 |
| Kentucky..... | 2,437 | 1,560 |
| Louisiana..... | 1,438 | 522 |
| Maryland..... | 1,438 | 931 |
| Mississippi..... | 1,438 | 1,119 |
| North Carolina..... | 2,371 | 1,440 |
| South Carolina..... | 1,566 | 1,393 |
| Tennessee..... | 2,228 | 1,816 |
| Texas..... | 2,829 | 2,597 |
| Virginia..... | 2,791 | 1,697 |
| West Virginia..... | 1,196 | 692 |
| Total..... | 36,736 | 19,431 |

Here is an increase in the South's railroad mileage since June 1, 1880, of 17,305 miles, or a gain of 89 per cent, while the rate of increase in all the rest of the country was but 69 per cent. Including the road constructed since January 1 the South now has over 37,000 miles of railroads. Let us sum up a few points to contrast the South of 1888 and the South of the census year 1879-80 (June to June). Surely these figures tell a tale of progress never surpassed by any other country in the world, and yet the South is just barely

getting under way in its development. Here are the figures:

| | 1888. | 1880. |
|--|-----------------|-----------------|
| Assess'd value of prop'y..... | \$3,858,509,867 | \$2,881,418,597 |
| Railroad mileage..... | 36,736 | 19,431 |
| Yield of cotton, bales..... | 6,800,000 | 5,755,359 |
| Grain, bushels, '87..... | 626,305,000 | 431,074,630 |
| No. of farm animals..... | 44,839,979 | 39,419,254 |
| Value of live stock..... | \$573,695,550 | \$391,419,254 |
| Value of chief agricultural products, '87..... | \$749,866,460 | \$571,098,454 |
| Coal mined, tons, '87..... | 16,476,785 | 6,047,831 |
| Pig iron produced, tons, '87..... | 919,430 | 181,200 |
| No. of cotton mills..... | 191 | 120 |
| No. of spindles..... | 1,495,145 | 716,000 |
| Value of cotton goods produced..... | \$43,000,000 | \$21,000,000 |
| No. of cotton-seed oil mills..... | 716 | 340 |
| Capital invested in cotton-seed oil mills..... | \$12,000,000 | \$1,000,000 |
| Phosphate mined, tons..... | 437,757 | 100,000 |

In the following letters we present the views of the governors and agricultural commissioners of the Southern States as to the condition of the agricultural interests of their States. The correctness of their statements cannot be questioned, and surely the picture which they have painted is a very bright one. Every letter tells of increasing prosperity, of decreasing farm debts, of contented labor, and of a glorious future which awaits the South. In writing to these gentlemen asking for their views upon the condition of agricultural and educational interests in their States, attention was called to recent statements about the poverty of Southern farmers, the lack of schools and the decline of the "Black Belt." This may explain several references in the letters to these matters:

In Agriculture as in Manufactures Alabama is Greatly Prospering—Crop Mortgages Decreasing—Labor-saving Implements Increasing.
CHIEF EXECUTIVE OFFICE,
MONTGOMERY, ALA., March 24, 1888.
R. H. EDMONDS, Esq.,
Editor of the Manufacturers' Record,
Baltimore, Md.:

Dear Sir—Your letter of the 19th inst. has been received, and has had my consideration.

The information which you seek concerns the interests of Alabama, and needs be valuable to the multitudes who have attention has of late years been directed to this State.

In 1870 the assessed value of property in this State was \$117,114,982; in 1880, \$123,757,073; and in 1887, \$314,925,860. There was expended for the public schools in 1870, exclusive of local taxation, \$364,070.81; in 1879, \$395,235.95; and in 1887, \$515,985.95.

These appropriations will appear small, but they indicate a growing and increasing purpose on the part of the people of the State to make the public schools what they should be. These schools every day becoming dearer to the people of Alabama, and I have no doubt that in a few years our facilities will approach, if not equal, the best in the country. Here and there may be found a man who questions the efficiency of the public school system. I am happy to say that he belongs to a small and rapidly diminishing class. I consider that the schools of the State, both public and private, are increasing in number, in attendance and efficiency. The agricultural interests of the State are steadily improving, and the amount of farm mortgages and liens on crops are decreasing. The farmers of the State are, in my carefully considered opinion, improving their farms, and are saving implements.

The resources in the mineral district of this State need no comment. The county increased her assessments in 1886 to forty thirteen millions in 1886 to forty

in 1867, and other counties are pressing forward in the grand march. The history of their development is familiar, but the great agricultural districts of the State have, in my opinion, been improving, not so rapidly, but as surely.

I think the condition of the "Black Belt" is more encouraging to the immigrant than ever before in the history of the State.

Slavery relegated to the slave all manual work, and the whites constituted very largely, indeed almost entirely, a class who did not engage in manual labor. Emancipation found the negro in the cotton-patch, in the corn-field, in the workshop, and engaged in every enterprise which presented us where manual labor was required.

From the hour of emancipation until this time the progress of the whites has been steadily in the direction of manual labor, encroaching daily and yearly on that domain which had been heretofore preempted by the slave everywhere throughout the State; and I consider it the most encouraging sign of the times that you see white men doing the manual work which had heretofore been done exclusively by the negro. More and more the white man is found actively engaged in tilling his own fields, in blacksmithing, in wood-working, in transportation and in the vocations where manual labor is required.

The immigrant who comes to Alabama day to day to make his fortune by actual work will not find the field occupied exclusively by negroes, but will find a large and growing company of white laborers who will constitute his co-workers and his neighbors—in the meantime, the negro is doing his part as well as could be expected.

In all the issues there is an advantage which belongs to his white brother, an advantage which is the inheritance from a very long and carefully guarded race.

Instead of a disposition to separate themselves from the whites, and instead of any disposition to monopolize any particular district of country, I am happy to

see the very opposite is the tendency with them. The disposition and tendency is to assert themselves, not as negroes, but as American citizens, and to distribute themselves among the rapidly increasing white population. Slowly but surely they are learning that their chances are to be improved even with no advantage or disadvantage on account of their color.

In the meantime the tendency is not towards miscegenation on either side, but as far as I can discover rather more local and more towards the preservation of the race features.

The tendency of the white population is to move more and more towards agriculture, and that of the negro is largely towards mining in the great mining districts of the State, which are yet the home of the white population. The whites are turning towards agriculture by consideration.

I have been looking to the reasonable returns on labor and of investments, and of equal contentment and tranquility. The negroes there drawn to the mining districts by the large wages which are there paid for manual labor, and the weekly payment along with them. If I may be permitted to speak of myself, I may add that I was born and bred in what is known as the "Black Belt" of Alabama, and have been familiar with its history since the war. The mode of accumulations from an active law the number of about twenty years have been and are being by me in agricultural lands in the "Black Belt," and I have never regretted my investments.

There has never, in my judgment, been more day in the "Black Belt" in Alabama than investments in agricultural lands would not certainly and surely pay to the absentee landlord eight per cent.

He will have less

trouble in receiving his returns than is required to clip the coupons from a three per cent. government bond. If he should give his personal supervision to his business, as long as it remains small enough to permit it, and afterwards choose his agents wisely, as did Richardson, of Mississippi, his returns would equal the returns from any legitimate business in the United States.

Very respectfully,
THOS. SEAY.

Farmers Prospering, Debts Decreasing, Wealth Increasing, and a Brilliant Future Before Alabama.

DEPARTMENT OF AGRICULTURE,
MONTGOMERY, ALA., Mar. 29, 1888.

MR. R. H. EDMONDS,

Editor Manufacturers' Record:

It affords me pleasure to state as a fact which cannot be successfully disputed, that every interest in the State of Alabama is prospering at this time. You ask particularly about the farming interests and I am happy to be able to reply that there is a steady improvement in agriculture. From reliable information received at this office from various localities I learn that crop liens and mortgages are not so numerous as in former years, and that farmers are gradually getting out of debt. On the uplands the improvement in buildings, fencing, &c., is very marked, and the thrift, independence, and prosperity of upland farmers are patent in all parts of our State. The improvement in the rich alluvial sections is not so striking or rapid as that upon the pine lands and uplands generally, but even in the "black belt" or prairie region of our State labor-saving implements and machinery are coming largely into use and the effect has been most advantageous. More attention is also being paid to the culture of grains and grasses and to the raising of stock than heretofore, and a vast improvement in this respect is evident.

To give you a definite idea of the rapid and wonderful growth of Alabama, less than ten years ago (in 1879) the aggregate valuation of property for taxation in this State was \$123,757,073.85. For the current year the valuation in round numbers is \$315,000,000. These figures can be relied on as absolutely correct. The rate of taxation for State purposes has been reduced proportionately and is now five mills on the dollar. It is not doubted that the reduction of the tax rates will go on as the taxable values steadily increase.

It is scarcely necessary for me to speak in this letter of the magical development of the mineral interests of Alabama. It is sufficient to say that in the one county of Jefferson, in which the city of Birmingham is situated, the taxable values increased from about \$2,500,000 in 1879 to over \$40,000,000 in 1887, a period of eight years. Nor is the improvement confined to Jefferson county alone, but is widespread throughout the mineral region of our State. This vast increase in wealth and population necessarily affects favorably the agricultural interests, as it creates a demand for provision crops, and the result is that market gardening and progressive farming are taking the place of the old plantation system. While the yield of cotton has not increased crops of all other kinds are growing greater each year and the increase of live stock indicates a healthy improvement in this industry.

In conclusion I will add that Alabama, taking all things into consideration, offers greater inducements to immigrants than any other State in the Union. Our lands are still cheap, though the values have advanced rapidly and are still advancing under the increased and increasing demand for all classes of lands. The mortality statistics prove Alabama to be one of the healthiest States in the Union, the death rate being below the average in the United States and far below that of New

York, New Jersey, Massachusetts or Rhode Island. Statistics of crime also show our State to be a most orderly and law abiding community as compared with her sisters. With every attraction of health, climate, soil, pure water, cheap lands, wholesome laws well executed, constantly decreasing tax rates, a public school system which is improving each year, and a mineral development which has attracted world wide attention but which is yet in its infancy, it is not unreasonable to assume that the future of Alabama is assured beyond the power of her enemies to impede her progress.

Respectfully yours, R. F. KOLB,
Commissioner of Agriculture.

Farm Mortgages Fast Decreasing—General Prosperity of the Negroes.

THE ARKANSAS AGRICULTURAL ASSOCIATION.

Secretary, W. L. WEBBER, Little Rock.

LITTLE ROCK, ARK., March 31, 1888.

R. H. EDMONDS, Esq.,

Editor Manufacturers' Record:

I say to you with truth and without hesitancy that the agricultural interest of Arkansas are daily improving. New lands are being opened every year. A larger acreage will be planted this year than ever before, and the crop will be more largely diversified than in any previous year. Our farmers conclude, and put it in practice, that it is time to raise their own corn, hay, forage, mules and meat. The number of farm mortgages are fast decreasing, thank the good Creator, and are for smaller amounts. Of course (the previous answer covers this point) our farmers are getting out of debt, and they are introducing labor-saving implements gradually. Allow me to add that probably the Negroes of Arkansas are better satisfied, happier, more prosperous and more hopeful than in any other part of the country, North or South. Among other things, they have \$75,000 expended in fair grounds and buildings at Pine Bluff, Ark., and annually hold a State Fair, conducted and managed throughout by themselves. In this city, Hot Springs, Texarkana, Fort Smith, Pine Bluff, Helena and numerous smaller places throughout the State their schools are most vigilantly attended, and they are prospering in this direction as well if not better than the whites.

Yours, W. A. WEBBER,
Editor Rural and Workman.

Agricultural Interests Marvellously Improving.

STATE OF FLORIDA,
EXECUTIVE OFFICE,
TALLAHASSEE, March 30, 1888

R. H. EDMONDS, Esq.,

Editor Manufacturers' Record:

I am glad to be able to say for my State that its agricultural interests are marvellously improving, that the number and amount of farm mortgages and liens on crops are decreasing, and that farmers are more prosperous generally. Their lands are yearly increasing in value, and their general advancement is marked.

As an evidence of the material advancement of the State I give the assessments for taxation for the years 1870, 1879 and 1887:

For 1870.....\$9,700,000
For 1879.....\$27,704,383
For 1887.....\$4,800,564

The following figures show the progress in the schools and what is being done to educate the white and black children in the State:

Total number of schools.
In 1870.....331
In 1879.....1,030
In 1887.....2,283

Total number of pupils.
In 1870.....14,000
In 1879.....27,034
In 1887.....30,453

Money expended for schools.
In 1870.....\$ 29,146.50
In 1879.....\$ 120,700.00
In 1887.....\$ 448,999.15

Very truly yours,

ED. A. PRATT.

A Reign of Prosperity in Florida—A Wonderful Present and a More Brilliant Future.

OFFICE OF
COMMISSIONER OF LANDS & IMMIGRATION,
TALLAHASSEE, FLA., Mar. 27, 1888.

MR. R. H. EDMONDS,

Editor Manufacturers' Record:

It gives me much pleasure to be able to say that our agricultural interests are improving. Liens or mortgages are decreasing; planters are getting out of debt; farms are being improved; labor-saving implements are being brought in. I am confident that Florida is to day entering on a degree of prosperity never before dreamed of. New industries of every description are constantly springing up all over the State. The tobacco and sugar industries are rapidly coming to the front and giving a new impetus to everything; new orchards of fruit of various descriptions are being planted; in fact, it is hard to realize the vast improvements that have taken place during the past eight years. Railroads have been pushed into the most remote parts of the State; others are being built as rapidly as money and men can build them. Last, but by no means the least, we can refer with pride to our educational advancement. This has, indeed, been wonderful; not confined to any locality or any class of people, but on a broad and liberal plan, reaching the most remote points, shared alike by white and colored, each having separate schools.

Very respectfully yours,

C. L. MITCHELL,

Commissioner of Lands and Immigration
and of Agriculture.

Mississippi's Wonderful Prosperity—Hon. S. E. A. Jonas Tells of the Wealth of this State—The Freedom of Farmers from Debt—The Rapid Progress that is Being Made.

WASHINGTON, D. C., April 18, 1888.

R. H. EDMONDS,

Editor Manufacturers' Record:

Before replying in detail to the inquiries suggested to you by advertisements upon the South that appeared recently in a prominent metropolitan journal, I would premise by saying that in my opinion you greatly overestimate the weight and influence of such attacks.

There was a time a few years back when the South, and particularly the Gulf States, was as unknown a land to the present generation of Western and Northern people as any portion of the "Dark continent," and they were prepared to credit and absorb as it were whatever villainous recitals fell from the pens of interested or malicious detractors, or from the lips of ignorant or vicious partisans; but the clouds have broken, and the South haters can hardly find an audience, respectable in point of numbers, anywhere North or West nowadays that does not contain intelligent men who have been among us or who have good and reliable friends or relatives who are with us and of us, who challenge their false utterances and compel debate in localities where a few years ago our people and country and institutions were mercilessly assailed and altogether lacked defenders.

It was perhaps a God-send for the South and one of those mysterious mercies that only years of suffering and experience and observation can interpret, that for a long time after the war closed our section was so darkly painted to the eyes and ears of Northern and foreign people, that the tide of immigration flowed in other channels, for the war left us impoverished in heart and goods and ready to sell out the little we had to the first bidders and seek new homes and scenes.

Left, however, to our own resources, denied the succor of capital from other sections or countries; condemned, maligned and abused by the malicious and ignorant,

our people went to work with the energy of despair to repair the ruins wrought by war and the era of misrule that succeeded it, and when in the course of time our efforts had compelled attention and our successes had excited admiration and envy, and immigrants of the very best class began to seek communion with us, and Northern and foreign capital sought to unite in the enterprises founded by Southern earnings, savings and pluck, the new era found our people happy and contented, and each man in his reconstructed home safely anchored for life, and while ready and anxious to welcome a new neighbor, no longer seeking a purchaser for the old homestead, the home of his boyhood and the birthplace of his children.

Now to your questions. You ask: "Are the agricultural interests of your State improving or are they declining?"

Let me answer this from the official records that we have at hand so far as they go. Corn is not our great staple, but in this State is regarded rather in the light of a tool to make cotton, and so essential a tool that the success of the year's venture depends not so much upon the size of the cotton crop and the price of the lint as upon the condition of our corn cribs when the cotton harvest is finished.

Corn the world over is the gauge and measure of an agricultural peoples prosperity, and so I will first respond in corn. The following is a table of the yields of that grain in Mississippi for the years named. The amounts from 1850 to 1880 I obtain from the United States census; the data for 1886-1887 is supplied by the reports of the Department of Agriculture, and the figures for last year are regarded by many of us who have given the matter much attention and inquiry, as falling several millions short of actual results:

CORN CROPS OF MISSISSIPPI.

| | Bushels. |
|-----------|------------|
| 1850..... | 28,446,553 |
| 1860..... | 29,557,682 |
| 1870..... | 15,637,316 |
| 1880..... | 21,340,800 |
| 1886..... | 25,507,000 |
| 1887..... | 30,633,000 |

There is no mistaking or misunderstanding the bearing of the above figures. Now as to cotton:

COTTON CROPS OF MISSISSIPPI.

| | Bales. |
|-----------|-----------|
| 1850..... | 44,393 |
| 1860..... | 30,507 |
| 1870..... | 54,936 |
| 1880..... | 963,111 |
| 1887..... | 1,900,000 |

The Agricultural Department does not venture upon an estimate of the cotton crop by State or general aggregates, but inasmuch as the receipts at almost every shipping point on rivers and railroads in the State are largely in excess of those of last year, we feel confident that we figure within safe and reasonable bounds in estimating Mississippi's cotton crop at about the census aggregate of 1840; and, indeed, the increased acreage in the Yazoo delta alone since 1879 should more than supply the 236,889 bales required to fill the gap between the census aggregate for 1880 and my estimate for 1887 without making any allowance for exceptionally good crops elsewhere in the commonwealth.

HAY IN MISSISSIPPI.

The census of 1880 gave to the State of Mississippi a grand total of 8,994 tons of hay. In those days there were not in all probability a hundred mowing machines and a dozen hay presses in the State. Today they are both almost as common in Mississippi as in the West, and out of the 74 counties in the State we are confident we speak within bounds in saying that at least 40 of them made more hay last season than the tenth census credited to the entire commonwealth, and hay has come to be regarded as one of the staple crops of the State, and one that will within the next 3 years compete with the grass product of the East and West in all of the seaport and metropolitan markets of the country.

It has been a fettered giant for years, owing to difficulties and adverse discriminations in the matter of transportation that discouraged mowing and packing, but the enactment of the interstate commerce law struck off its shackles, and Mississippi hay will ere long follow Mississippi's cotton in all its journeyings by land and sea.

MISSISSIPPI'S LUMBER.

The entire cut of lumber in this State in 1879, according to the tenth census, was 168,747,000, and to-day the exports from the port of Pascagoula alone exceed two millions of feet a week, and yet this does not represent a sixth of the cut of the State, nor include any hardwoods. In 1880 the hardwood industry was in its infancy in Mississippi, but to-day the whirr and shriek of the saws can be heard in every direction in the great hardwood forests of the Yazoo delta, and it is worthy of note that in this as in all other industries of the State home men and home capital are chiefly employed in bringing Mississippi to the front. Enormous areas of timber lands have been purchased in the State by Western lumbermen, but as yet but few of them have removed their mills and commenced operations here. To better illustrate the performance of our mills and the development of the lumbering interests of Mississippi, and to give your readers an idea of the foreign demand for this great staple of ours, I submit the following report of exports of lumber from the port of Pascagoula, on our south coast, from January 13 to February 9, 1888:

| | Feet. |
|-------------------------------------|-----------|
| To British America..... | 299,491 |
| To Antwerp, Belgium..... | 335,394 |
| To Havre, France..... | 485,768 |
| To Bordeaux, France..... | 149,576 |
| To London, England..... | 305,147 |
| To Dordrecht, Russia..... | 366,790 |
| To Buenos Ayres, South America..... | 5,030,237 |
| To Key West, Fla..... | 368,886 |
| To destinations (not given)..... | 1,050,000 |
| Total..... | 6,181,561 |

In 1880 the census only credited Mississippi with 60,000 staves as the entire product of the State, and yet one manufacturer, Mr. S. H. Berg, proprietor of the steam heading and stave factory at Aberdeen, had 300,000 white oak staves ready for shipment on the first of this month, and expects to turn out at least 1,000,000 during the current year, for which he finds ready market in Chicago, Baltimore and St. Louis.

DAIRYING.

Mississippi in 1880 could hardly boast a half dozen farms or herds within her borders. To be sure everybody in town or country kept cows, and we all made butter to greater or less extent, but there was little thought of any market but that of the neighboring village for the surplus. Today Mississippi boasts more dairy farms and creameries than any State of the South, except Missouri, Kentucky and Tennessee; her butter is an important article of export, and finds markets not only in every Gulf State, but even in Ohio, Illinois and New York, and while every county has its fine herds of registered Jersey, Holstein and shorthorn cattle, Oktibeha county boasts some of the largest and finest herds on the continent, and Mississippi is fast gaining control of the market for these animals so far as the lower tier of States and Mexico are concerned, and one bull of her breeding is at the head of the finest herds in New Jersey.

INDEBTEDNESS OF FARMERS.

In reply to your inquiries, "Are the number and amount of farm mortgages and liens increasing or decreasing? Are farmers gradually getting out of debt, improving their farms and purchasing labor-saving implements, or are they yearly getting deeper in debt to their factors and commission merchants?" I would say: "There has never been a time since the war when Mississippi farmers were as nearly

out of debt as at present. There is not to-day one farm mortgage in existence to where there were twenty ten years ago, and in fact it may be confidently asserted that the small farmers are in many parts of the State almost entirely free from debt, while the large proprietors who necessarily commenced operations under a heavy burden after the war, have in most instances gone to the wall long ago or are now either free or in condition to control their indebtedness.

To give you the strongest possible argument in support of my assertion, I will state a fact familiar to all newspaper readers, and that is that in every county in Mississippi the "Farmer's Alliance," an organization that regards "keeping out of debt" as the chief article in its creed, is gaining tremendous headway, and is so strong and influential as to be able to dictate terms to supplymen, warehousemen, and people in all lines of business and trade, a condition of affairs only possible in communities where immunity from debt assures independence in buying and selling.

As to indebtedness to "factors and commission merchants," that is something comparatively rare in Mississippi now, except in the lower valley; and such farm indebtedness as does exist is chiefly held by the local Mississippi merchants and bankers. The loans called for now a days are generally in the harvest season, and the money is mainly on short time and to be applied to harvest purposes or moving the crop.

Since 1880 the method of handling the cotton crop has been revolutionized in almost all portions of the State. This was mainly brought about by the organizing of steam compress companies in every considerable town, where cotton that was formerly shipped to port in the plantation bales is now compressed ready for export by land or sea without further manipulation or any of the multitudinous charges and gouges that formerly followed it and dwelt with it from the time it left the farm gin house until it was cut open at the manufactory.

The result of this has been to greatly cheapen car load freights in all directions, and so the bulk of the crop is now sold at the interior towns where delivered by the men who make it to the agents of mills, etc., who flock to any point where the staple is delivered by the farmers, and where good warehouse, banking and compress facilities exist. Cotton sales are always spot cash, and in every considerable Mississippi town buyers for Havre and Liverpool are as common as buyers for New York and Fall River. The cotton is frequently shipped from our interior towns on bill of lading to France or England, and goes direct from the point of purchase to ship-side at New Orleans or New York.

As to the purchase of labor saving implements, I would say that it has always been the habit of our farmers to purchase the tools and implements best adapted to their soil, crops and laborers, and they generally understand this proposition much better than their critics from other sections.

The crop of 1887 paid tens of thousands of our farmers out of debt, and their large crops of corn, hay, oats, sorghum, potatoes, etc., etc., left them in splendid condition to enter upon the new year; and throughout the State a majority of the small farmers made abundance of meat, while all made more or less.

The fact that the Mississippi farmers made and sold during the last season between fifty and sixty millions of dollars worth of a staple that commands the gold if demanded, wherever offered, should satisfactorily answer all questions as to their solvency, when it is remembered that farm credits in this country are seldom

equal to fifty per cent. of crop expectations, and that the crop of 1887 largely exceeded the estimates of most agricultural statisticians.

HORTICULTURE.

The growing and exporting of fruits and vegetables was an insignificant factor in our industries in 1880, but to-day constitutes the main employment of thousands of our people, and will in the season of 1888 probably represent transactions aggregating millions of dollars. In one of our counties, Copiah, a large proportion of the people are making it their main employment, while in Hinds, Madison, Pike, Lincoln, Jackson and in fact in all portions of the State it is receiving great attention, and tens of thousands of bushels of early fruits and vegetables are finding ready and remunerative markets in the West and North, and canneries and box factories are being erected in many localities.

RAILROADS.

The best commentary upon the condition of affairs in our State is to be found in the fact that all of the railroads report large excess of receipts in 1887 over previous years, and yet they have lost weight to be one of their chief items of freight, the importation of corn. Since 1880 Mississippi has about doubled its railroad mileage, and many new lines are projected and will be constructed in the near future. Within the last thirty days elections have been held in many of the towns and counties upon the question of subscribing their bonds in consideration of the extension of old or the building of new lines, and in all cases the proposition have been carried by overwhelming majorities. The Engineering News, of New York, which is probably the best authority on that subject, reports as follows for Mississippi in 1887:

| | |
|-------------------|-------|
| Track laid..... | Miles |
| Construction..... | |
| Projected..... | |

In manufacturing we have made immense strides since 1880, and the beauty of our advance upon that line is that the list consist of thousands of minor industries having representation in almost every town and village. We have no great mines around which to cluster furnaces and rolling mills as at Birmingham and Chattanooga, but we think that the census of 1890 will show nearly as many Mississippians employed in industrial establishments as will be reported by mining States in proportion to population.

In spindles and looms we have more than doubled since 1880, and the increase will be very great this year in factory buildings now under construction, and we can boast in the Mississippi Mills at Wesson, in Copiah county, one of the most extensive, if not the most extensive woolen factory in the South.

WEALTH OF THE STATE.

In the matter of property valuations assessment rolls as consolidated by the auditor under our present system give but faint idea of the State's actual wealth, and we have no other channels through which to obtain official information. Since 1880 nearly a thousand miles of railroads have been built in the State at a cost of at least \$25,000,000, and yet this vast item not considered at all in our property enumeration, for the new railroads are exempt from taxation for a term of years while the old railroads are not included in the property lists as representing item valuation, for the reason that under our laws they pay taxes on mileage and not assessment. The total railroad mileage in the State is about 2,100, representing investment of fully \$53,500,000, and the assessment rolls take no account whatever of this immense aggregate of wealth within our State.

Since 1880 the building of mills and factories has been the general rule that

of the Commonwealth, and there is hardly a county in the State that is not well represented in this progressive march; but these establishments under our laws are exempt from taxation for a term of years, hence the assessment rolls convey no intimation to the world of their existence, while, on the contrary, by a strange anomaly, their erection in many instances effects a reduction in the aggregate assessment of the county instead of an increase, for the reason that moneys at interest or representing solvent credits were taxed, but when called in or drawn from bank and put into manufacturing establishments in the same town, county and State immediately became exempt; and were as thoroughly lost to any official record of values as though cast into the fire, instead of being progressively employed.

In addition to the two enormous items above stated, our laws exempt from assessment and taxation all agricultural implements, mechanics' tools, libraries, all produce raised in the State, all wearing apparel, poultry, furniture to the amount of \$350, two cows and calves, ten head of hogs, ten head of sheep, all colts under three years of age, all pictures and works of art not kept for sale as merchandise, etc., etc; hence, none of these things are included in any tables of values representing Mississippi's wealth and resources. Commenting upon this subject in his message to the legislature last January, Governor Robert Lowry said, referring to valuations and assessments:

"In considering the subject of finance it may be safely asserted that it would be difficult to find a well informed man in the Commonwealth who would hazard his reputation by saying that the property of the State is assessed at over one-third of its value. * * * It is asserted and unchallenged that the values in Mississippi could not be purchased for four or five hundred millions of dollars. * * * The present method of estimating values had its origin in a seeming necessity under a destructive regime that was in antagonism to property owners, who at the time were struggling to recuperate from the results of the war. The burdens imposed at the time caused a forfeiture of nearly 30 per cent. of the land of the State for non-payment of taxes, and it seemed that taxation and confiscation were almost synonymous terms."

In reference to this matter State Auditor Stone says in his report to the legislature: "During my incumbency (1886-87) the sale of lands to the State for taxes has been nominal, and in many counties where forfeitures heretofore were largest there have been none at all. In short, I can point to no circumstance that indicates so clearly the improved feeling of confidence as the fact that the people are holding on to their lands and endeavoring to acquire more at constantly advancing prices. Only a few years ago the State held enormous bodies of forfeited lands in every county. A large percentage of these lands are now restored to the tax-paying lists."

In view of the existing condition of affairs and the strong recommendations of the governor and auditor, the legislature at its recent session ordered a new assessment of lands for 1889, and provided rules, formulas and penalties for the government of assessors that will doubtless result in Mississippi going to the census of 1890 with a schedule of valuations at least double that of 1887, regardless of her very liberal system of exemptions.

The following figures represent the assessments in Mississippi for the years named:

| Years. | Realty. | Personalty. | Aggregate. |
|-----------|--------------|--------------|---------------|
| 1880..... | \$79,459,530 | \$31,158,599 | \$110,618,129 |
| 1887..... | 90,770,135 | 39,617,119 | 129,387,254 |

EDUCATIONAL.

In reply to your inquiry as to educational matters in the State I would say:

The general public school system was not put in operation in Mississippi until June, 1870, hence the statistics given in the 7th, 8th and 9th censuses are meagre and comparatively worthless, except as regards the item of aggregate income; and in the matter of illiteracy it is notorious that in many parts of the State the census reports were the results of guess work rather than inquiry, for often the enumerators put a child down among the illiterates if it was not attending school. I cannot remember ever to have seen a white child of eight years old or over in Mississippi who could not read, and there is no good reason why there should be one in the State; I have seen a few illiterate white adults, but in all instances they were people of industry and more than average intelligence; excellent citizens, accumulators of property and generally well informed in regard to current events. Nor did they, like many of the great "illiterates" of old who carved out empires with their swords, and governed them wisely and well by dint of their ponderous intellect, hold education in contempt, but on the contrary kept their shortcomings so well concealed that the mask was only raised when signatures were required to legal documents.

As to the negroes education is almost universal among their children in Mississippi; they attach the greatest importance to the attainment of at least the rudiments, and look upon the fact of their offspring being able to read as a certification to their own respectability; an elevation in cast or rank as it were.

The number of public schools in the State and amount of income exhibit steady increase, as the following official figures will demonstrate. The data is obtained from the United States census, except that for 1887, which I get from the report of the State superintendent of education to the legislature:

| Years. | Teachers. | Income. |
|-----------|-----------|-----------|
| 1853..... | 1,168 | \$370,276 |
| 1860..... | 1,695 | 733,611 |
| 1870..... | 1,708 | 780,739 |
| 1880..... | 5,113 | 830,704 |
| 1887..... | 6,113 | 979,326 |

In addition to her numerous public schools, the State had in 1885—the latest data attainable—969 private schools, colleges and academics, and as the number has notably increased in every county, it is reasonable to estimate the number in 1887 at 1,300, some of them having hundreds of boarders and ranking among the best in the Union. Mississippi is a State of academics, and she has few counties that do not boast at least one institution of the kind that is a pride and pet of the community.

Our Agricultural and Mechanical College, (and we also have one for the colored boys), is claimed to be without a superior in this or any other country, and Mississippi was the first State to throw open the classes of every educational institution, from her university and agricultural college all the way down the line to females, and in 1885 the State university gave to the world the first female "First Honor Man" and graduate that ever attained that distinction in any State or government institution, in this or any other country.

Every State institution of learning is free to her own sons and daughters, and she was the first and is yet the only State that has established a State industrial institute and college for girls, where every useful employment by which woman can earn an honest livelihood is taught, including printing, telegraphy, phonography, wood carving, etching, designing, chemistry, book-keeping, dressmaking, drawing, painting, and all the more homely occupations in addition to all of the usual branches and accomplishments; and many of its graduates have found employment as book-keepers, phonographers, etc.

Her agricultural college was the first in the country and the only one as yet, we think, to establish a chair of dairy hus-

bandry, and its college herd includes 364 head of Jerseys, Holsteins and fine grades. It has a creamery, which, in addition to handling the yield of its own herd, disbursed to patrons in the neighborhood last year for cream over \$12,000. The college farm and creamery have not only been self-sustaining, but highly remunerative, and most of the labor is performed by the cadets, who are required to work two hours a day for which they are paid a small amount per hour.

The number of students in 1876 was 415, but that was found to be a larger number than could be properly accommodated. The attendance is only limited by the ability of the State to provide for the applicants.

The attendance at the colored agricultural college for 1886-87 was 209, and President Burrus, in a communication to the governor in discussing the affairs of the college, says: "Mississippi is ahead of her sister States in her efforts to put within the reach of her colored population liberal instruction in the principles of agriculture."

The attendance at the State industrial institute and college for white girls in 1885-6 was 341; in 1886-7 was 388, and this year there were 476 applications for admission from Mississippi besides many from other States. The attendance, like that at the A. & M. colleges, has only been limited by the capacity of the dormitories.

The attendance at the State university in 1886-7 was 185, and this year it is in the neighborhood of 235. The catalogue for 1886 contains the names of 8 young ladies, and among them one bachelor of arts, one bachelor of science, two bachelors of philosophy, and one recipient of department diploma.

The reports from the county school superintendents of all the counties to the State superintendent exhibit an excellent condition of affairs, and no Southern State is more successfully solving the problem of separately educating the youths of both races than Mississippi.

S. A. JONAS.

Farmers Getting Out of Debt—Fewer Mortgages or Liens—Agricultural Interests Greatly Improving.

STATE OF NORTH CAROLINA,
EXECUTIVE DEPARTMENT,
RALEIGH, March 21, 1888.

R. H. EDMONDS,
Editor Manufacturers' Record:

In answer to your favor of the 19th inst. I have the honor and pleasure to give the following information:

1st. The agricultural interests of North Carolina are most decidedly improving. Our farmers are gradually getting out of debt, improving their farms, and are fast increasing the number of labor-saving implements and machinery in use. I have no data concerning agricultural liens and farm mortgages, but, from the increased prosperity of our people, I am convinced that they are not near so numerous as in former years.

2d. School facilities are improving every year in North Carolina. In the year 1871 the State expended for common school education the sum of \$171,497.94; in 1879 the sum of \$396,040.85, and in 1886 the sum of \$653,087.83. These sums do not include the amounts expended by our cities and towns in supporting graded schools. In a large number of towns these schools have been established, and are maintained by public taxation. The State University and the three denominational colleges and the large number of private schools of the State are all well patronized and are in a prosperous condition.

3d. In the year 1870 the assessed valuation of real and personal property of the State was \$103,483,968; in 1880 it was \$160,916,907; in 1887 it was \$310,085,453—showing an increase of over 100 per cent. since 1870. Very respectfully yours,

A. M. SCALES.

Improvement in Agricultural Interests.

NORTH CAROLINA
DEPARTMENT OF AGRICULTURE,
RALEIGH, March 28, 1888.

R. H. EDMONDS, Esq.,

Editor Manufacturers' Record:

The agricultural interests of North Carolina are improving. The latest statistical advice reaching the Department of Agriculture is matter for congratulation. The question of labor, so important to the farmer, is much less complained of than a few years ago. In reply to the question "Is labor efficient?" sent to correspondents in every county of the State, more than 80 per cent. of the replies were in the affirmative. That the agricultural condition is improving is amply sustained by an examination of the present condition of the farm and the live stock upon it. We have had a mild winter. Wheat, oats and rye are in good condition the State over. Farmers are encouraged and are diligently preparing for large crops of corn, cotton and tobacco; they are improving their farms and farm buildings, and are adding improved implements to aid in cultivating and harvesting crops; they are manufacturing large quantities of home-made manures in compost heaps; they are seedling more clover and grass, and are learning to practice economy by producing more of their domestic supplies. The condition of live stock is better than for several years. The average of all animals in the State is 804. This estimate includes horses, mules, cattle, sheep and swine.

The educational facilities of the State are adequate and efficient. The public schools are well patronized by both races. There is a disposition to raise the standard in colleges, and the graded schools are becoming more efficient. The State leads in facilities for the education of the Negro race. They have an equal share in the public schools; have their own normal schools and several large and sufficiently endowed colleges. Very truly yours,

JOHN ROBINSON, Commissioner.

Per T. K. BRUNER, Secretary.

South Carolina's Prosperity—Farmers are Making Money—Crop Liens and Mortgages Decreasing.

DEPARTMENT OF AGRICULTURE,
COLUMBIA, S. C., March 23, 1888.

MR. R. H. EDMONDS,

Editor Manufacturers' Record:

It affords me great pleasure to reply to your communication, but you will permit me to say in advance that I do not share your apprehensions that slander of the South will unfavorably affect its efforts to attract capital and immigration. Thanks to such papers as the MANUFACTURERS' RECORD, to persistent advertising, and to the reports of shrewd business men who have visited this section within the last few years, our resources have become so well known that misrepresentation will only serve to stimulate inquiry, that will result in making these resources better known.

South Carolina was originally selected as a home by wealthy and enlightened people, who declared that it was "the fairest land of promise their eyes had ever rested upon," and within the past few years Col. A. K. McClure, of the Philadelphia Times, after extended observation, has deliberately published to the world his opinion that "it is naturally the richest State of the whole Union, without any exception." It is hardly reasonable therefore that a State possessing such natural advantages should long escape the attention of the capitalist or the thrifty and intelligent immigrant. But you do not ask me to discuss the resources of the State. You desire to know the industrial progress it has made in recent years, and the present condition of the agriculturists. Knowing the value of your space, I will present the statements in a condensed form.

MANUFACTURES.

| | 1870. | 1880. | 1887. |
|--------------------------|-------------|--------------|--------------|
| Establishments..... | 1,584 | 2,078 | 3,371 |
| Capital invested..... | \$5,400,118 | \$11,205,364 | \$22,204,070 |
| Value ann'l product..... | 9,858,981 | 16,738,008 | 31,975,103 |

Could figures speak more eloquently? The value of manufactured products has nearly doubled within the last seven years, is three and a-quarter times as great as in 1870, and nearly four times as much as in 1860.

RAILROADS.

| | 1880. | 1887. |
|------------------------|-------------|-------------|
| Miles completed..... | 1,369 | 1,813 |
| Railroad earnings..... | \$4,108,040 | \$6,534,244 |

In 1860 there were only 950 miles of railroads in the State. From 1880 to 1887, 387 miles have been built at a cost of \$3,500,000, and the railroad commissioners say that more miles of rail road will be opened this year than were ever put in operation in any one year of the State's history. In 1880 the railroads transported 1,283,468 tons of freight, and in 1887 2,190,746 tons. How do those gentlemen who charge that we are growing poorer account for these facts? If their statements are correct, what use would there be for more miles of railroads? What could the roads find to transport? If this increase in the amount of product transported is due to goods hauled into the State, then it proves that we have something to exchange for them, and if it proves that it was product exported from the State, then it must be admitted that we are producing a surplus of something. The explanation is a matter of indifference. The fact shows a healthy development. But our people have only begun to construct railroads. New routes are projected in every direction. A map of the State indicating roads in operation and those projected would show a perfect network of iron highways. And it may be added that our people have shown so much interest in the matter by voting subscriptions, &c., to all new routes proposed, that Northern capitalists are glad to co-operate with them in all these enterprises.

MINING.

South Carolina's mineral production consists chiefly of her phosphate rock, and the value of the output of the phosphate mines last year was more than three times as great as the value of all the precious metals produced in all the Southern States for the same period. The value of crude rock mined in 1887 was little less than \$1,800,000. Phosphate mining was unknown in 1860. In 1870 the production of rock was 19,989 tons, in 1880, 190,162 tons, and in 1887, 432,757 tons. About 200,000 tons of this rock was manufactured into fertilizers in this country, and the consumption of fertilizers in South Carolina has increased from 70,000 tons in 1880 to 96,000 tons in 1887, and it will doubtless reach 120,000 tons in 1888. There are four gold mines in active operation using about \$300,000 capital. Recent discoveries of kaolin have given a decided impetus to the mining of that valuable product \$350,000 having been invested in kaolin mines during the year 1887. This will lead in a few months to the establishment of various manufacturing industries. The total value of all mineral products in South Carolina in 1880 was \$1,371,939, and in 1887, \$3,093,028. Does 55 per cent. increase in value of mineral products in seven years, derived chiefly from mines in the "black belt" of South Carolina, give much encouragement to those who contend that such sections of the South are destined to share the fate of Hayti? If there are any such doomed places they are not to be found in the "black belt" of South Carolina.

PROPERTY VALUATIONS

It is well known that the assessments of property for taxation never represent actual values, but accepting them as correct we find by reference to the reports of the Comptroller General of this State, that in 1880 the total assessed value of all real and personal property in South Carolina was \$120,000,000, and in 1887, \$141,000,000,

an increase of \$21,000,000 for the period, or \$3,000,000 per annum. About \$6,500,000 of the increase was in real estate, not in cities and towns, representing that amount of permanent improvements put on the farms of the State, and this brings us to a consideration of the

AGRICULTURAL INTERESTS.

The value of agricultural productions in 1880 was \$42,000,000, and in 1887, notwithstanding the decreased price of farm products, \$47,000,000, a difference of \$5,000,000 in the value of the two crops. This simple statement explains much of the activity in railroad building. The demand for increased transportation facilities has been caused partly by the increased productions of the State. It also explains how the farmers have been able to add \$6,500,000 to the value of their farms during the past seven years.

The writer has been unable to trace the amount of the mortgages upon the lands of the State, but this system of raising money has not prevailed so generally in South Carolina as in the Western States. Recent official publications show that in the latter section of our country the farms are blistered and plastered with mortgages, and if these evidences of indebtedness indicate poverty, then the South, in comparison, is wealthy and progressive. Our farmers have resorted to the lien system, damaging in its operation, it is true, but in many respects a preferable to mortgages on the land. In 1880 the value of supplies bought on credit by our farmers was \$7,350,000, and in 1886 only \$5,000,000, a decrease of \$2,350,000. We have collected no statistics of this character since 1886, but there is no doubt about the fact that the amount purchased in 1887 was greatly less than in 1886. The crop of 1887 was produced at less cost than any crop grown in the State for several years. The yield of cotton was better than in any year since 1882, and the price obtained a paying one. The corn crop was perhaps the most abundant ever produced, and fair yields were obtained from the smaller crops. From every part of the State reports show that the crop of 1887 was a "debt paying" one, and the farmers are in better condition, financially, than they have been for several years. Increased attention is paid to stock-raising and dairying. In every county blooded stock has been introduced, and a great improvement is noted in every section. Truck farming is profitably conducted, and raising fruit for market is beginning to be an industry of no inconsiderable proportions. Farm labor last year was reported more efficient than for several years, and so far no complaint has been heard this year either as to efficiency or scarcity of labor. The best feeling exists between employer and employee, and all are earnestly engaged in developing the resources of the State.

Let me append here a brief summary showing the industrial progress of the State since 1880:

"It is shown that, as compared with the census year 1880, the total value of taxable property in the State has increased \$20,000,000; the value of live stock has increased \$7,500,000; farm productions exceeded those of 1880 by \$5,000,000; fruits and vegetables \$700,000; the value of mineral products, \$720,000. In the manufacturing industries there has been an increase of 1,193 establishments, employing 18,589 more hands than were so employed in 1880; the capital invested has increased \$10,999,000, and the value of manufactured products, \$15,200,000.

Since 1880 four hundred and forty six miles of railroads have been completed. From November 1 1885, to November, 1887, two hundred and two miles have been built at a cost of \$3,500,000; the railroad earnings for 1887 were \$2,500,000 in excess of those of 1880, and the value of rail-

road property has more than doubled since 1880, the increase being \$3,800,000, while the total value of such property in 1880 was \$7,390,000."

Surely nothing more is needed to dispose entirely of the absurd statements regarding the industrial condition of South Carolina? No matter what our enemies may think, we can safely say that no part of this State is in any danger of sharing "the fate of Hayti." Permit me to add an extract from a recent letter from Col. A. K. McClure, of the Philadelphia Times, written to his paper:

"South Carolina should have five times her present population, and be able to feed it from her own fields without impairing her more valuable crops of cotton and rice, and every pound of her cotton could be more profitably spun and woven on her own superabundant water powers, than any other place on the continent."

In conclusion, allow me to commend the MANUFACTURERS' RECORD for its efforts to promote the material condition of the South, and for the great good it has already done this section. Very respectfully,

A. P. BUTLER,

Commissioner of Agriculture.

Virginia Farmers Doing Well, and not Troubled with Mortgages or Liens.

COMMONWEALTH OF VIRGINIA,
DEPARTMENT OF AGRICULTURE,
RICHMOND, VA., Mar. 23, 1888.

R. H. EDMONDS,

Editor Manufacturers' Record:

I have carefully read and considered the extract, and am satisfied that the writer did not care to risk his reputation for veracity by naming the State of Virginia, although the term "black belt" used by him is usually and commonly applied to a considerable portion of Virginia. If intended to apply to Virginia, it is absolutely false, both as to what is asserted as fact, and as to conclusions present or prospective. I am personally as well acquainted with the agricultural population of Virginia, both black and white, as the average Virginian born and always living in the State; and better acquainted than any non-resident can be.

Lands are cheap in Virginia, and much of its area for sale, not because farming and planting, and the various agricultural and pomological industries are not profitable and increasing—not because Virginians owning land are running away from the State, (a few have probably done so, and have quickly returned half-frozen, glad to get in their old Virginia chimney corners again) but because we have too much land, uncultivated, because its owners have not capital to build on that which ought to compose separate farms; and because tenant farming, although in many counties compulsory, (better than no cultivation) is unprofitable.

Many men have from 500 to 5,000 acres of land, who ought to, and would gladly own and cultivate only 250, and they desire to, and wisdom suggests, sell the balance for less than its real value, and have capital to cultivate the balance in the best manner, with modern machinery, owning plenty of the best improved stock. This will benefit the owners, and build up the State. Our people are not paupers, nor bankrupts, nor do they wish to emigrate and leave their old homesteads. They do want a moderate price for their surplus lands.

Agricultural industries of every kind are increasing in Virginia. I say nothing of the great development of iron, coal and other metals, nor of the shipments of lumber. Canneries for fruits and vegetables, dairies and creameries, packing establishments for meats, sumac and bark mills are rapidly increasing. There has been a large increase in the production of poultry, butter, fruits and vegetables for market. In many, very many, sections money has been made by native Virginians, whose fathers

owned the land which these now cultivate. Men have become "well off" who started "after the surrender" with nothing but their hard hands, and the pluck and endurance of good Confederate soldiers. They own small farms of from 100 to 300 acres, (some more) which they bought and paid for. If the writer of the extract "from a leading daily paper" will go through Virginia, will go to our numerous country churches, to our many country school houses, or to our county courts, he will find as well-dressed, well-fed, cheerful a population, as any State in the Union can present.

We have a few cronkers; we have always had them. We had them in the war, and they always pan out the same; they are no account, waiting Micawber-like for some thing to turn up, and something good will turn up for the good of those in all Virginia who trust to their sound brains, strong arms and a good Providence in this really goodly land.

Virginia farmers are not troubled as a general thing by mortgages. Lands are on the market here, not because they are mortgaged, but because there is a very large surplus.

Collegiate education is not declining in Virginia, but what is better, graded public schools, high schools, normal schools, grammar schools are increasing, are better taught, and a young man or woman can get as good an education now in the public high schools as they once got in many colleges; and a poor boy, if he has the pluck of a Luther, and will work for his board, can graduate at the University of Virginia, our great public school—now what its founder wanted it to be.

We have probably the best colored population in the United States, North or South. We had the most intelligent, orderly, faithful slaves before and during the war, and now they are the best colored people in the Union. Look at our colored schools. Look at our asylums for their care. There are no evidences now of dissatisfaction or turbulence among them. They are the best and cheapest laborers in the world, and for tobacco and cotton have no superiors. They are not "inefficient" in our "black belt."

As you have suggested in your letter, probably this publication is to prevent parties seeking homes, or desiring to invest capital, from coming South. Men who have carried thousands to fearful deaths along the frozen lines of Northern railroads, probably still report the statement that kept immigration from the South and turned it to the prairies.

Very truly yours,
THOMAS WHITEHEAD.

A Rapid Growth in Agriculture and Manufactures.—Outlook Brighter than ever Before.

STATE OF WEST VIRGINIA,
EXECUTIVE DEPARTMENT,
CHARLESTON, Mar. 23, 1888

R. H. EDMONDS, ESQ.,

Editor Manufacturers' Record:

Complying with your request I send the following facts relative to this State:

| Year. | No. schools. | Total cost education. |
|-----------|--------------|-----------------------|
| 1865..... | 133 | \$ 7,722.00 |
| 1875..... | 299 | 763,819.45 |
| 1885..... | 4,159 | 1,043,266.06 |
| 1887..... | 4,587 | 1,087,674.00 |

Total amount expended for public schools from 1865 to 1887, inclusive, \$15,894,487.60. This does not include expenditures for our university and six normal schools.

| Year. | Population. |
|-----------|-------------|
| 1870..... | 449,064 |
| 1880..... | 618,443 |
| 1887..... | 700,000 |

*Estimated on capitulations.
Assessed value real and personal property, including railroads:

| Year. | |
|-----------|---------------|
| 1870..... | \$239,635,912 |
| 1880..... | 346,406,100 |
| 1887..... | 277,341,69 |

Miles of railroad operated:

| Year. | Miles. |
|-----------|-----------|
| 1870..... | about 400 |
| 1880..... | 1,430 |
| 1887..... | 1,813 |

The agricultural, mining, coking, manufacturing and commercial industries of this State have been marked by a rapid and healthy advance, and the outlook at this time is more promising than at any period in the history of the State.

Very respectfully,
E. W. WILSON.

GADSDEN, ALA.

"The Hub of the Mineral Belt."

— ONLY —

IRON AND COAL

City in Alabama with River Transportation.

THE GADSDEN LAND AND IMPROVEMENT CO.

Own large tract of Eligibly Located Residence Property in the Most Desirable Part of the City, and have fine location on river and railroad for

MANUFACTURING ESTABLISHMENTS,

And are offering great inducements to manufacturers to locate their plants in this FAVORED LOCALITY. No place in the South has such Wonderful Advantages. Situated in the midst of the RICHEST IRON SECTION in the State, at the foot of Lookout Mountain on the banks of a Navigable River (THE BEAUTIFUL COOSA), surrounded by Forests of the Finest Timber on the Continent, with Fine Building and Fire Clay, and the FINEST BUILDING STONE all around us, with

Uninterrupted Health, and the Purest and Best Water, and Finest Drainage of any City in the State,

Gadsden should become the

← GREATEST MANUFACTURING CENTER OF ALABAMA. →

The Alabama Great Southern, Rome & Decatur, Tennessee & Coosa, Anniston & Cincinnati Railroads, with the ever flowing Coosa, navigable the year round, gives us as **FINE TRANSPORTATION FACILITIES** as any other city enjoys.

We now have Railroad Car Works, Furnaces, Foundry and Machine Works, Saw Mills, Sash, Door and Blind Factory, Furniture Factory, Ice Factory, Paint Mills, Grist and Flouring Mills, Cotton Ginnery, Fine System of Water Works, Electric Lights, Telephone Communication over City, and also to neighboring cities, Atlanta and Rome, Ga.

WE WANT Rolling Mills, Bridge and Bolt Works, Cotton Factories, Woolen Mills, Furniture Factories, in fact all kinds of Factories, even Coffin Factories, (but we want to ship the Coffins to some of the other booming cities.

Liberal Grants of Land will be made by THE GADSDEN LAND & IMPROVEMENT Co., to any of the above-named industries.

FOR FURTHER PARTICULARS ADDRESS

M. L. FOSTER, Sec. & Treas.

THE GADSDEN LAND & IMPROVEMENT CO.

Post-Office Box 145.

GADSDEN, ALABAMA.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

Which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the **County Seat of Talladega County.**

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A. & A. Railroad, and is the present terminus of the T. & C. Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and **THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE.** The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a **SUPERIOR QUALITY OF GAS.** Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A SASH, DOOR and BLIND FACTORY, a FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL, and various other industries are in successful operation, and the TALLADEGA ICE CO. cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A Spoke and Handle Factory and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent, within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. **SPRING LAKE PARK** is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., **Talladega, Ala.**

SHEFFIELD, Colbert County, Ala.

The Iron Manufacturing Center of the South.

BEING at the head of navigation, and on the south bank of the Tennessee river, Sheffield is the natural outlet for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best distributing point over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Four railroads certain, and several others assured. Principal shops of Memphis & Charleston Railroad will be erected here pursuant to written contract. These will employ between four hundred and five hundred mechanics, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

Five Blast Furnaces Now Under Construction,

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class daily newspaper is regularly issued. Furniture Factory, Bottling Works, Bakery, Dummy Street Railroad, Electric Lights, Agricultural Implement Works, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Paint Works, Stove Works and Compress now being erected. Other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of push and energy. No "Old Fogy" element here.

No better point for profitable investment.

Sites for Manufacturing Enterprises,

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,583. Increase of population, 800 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of brown hematite iron ore within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class coking, steam, gas and grate coal. Timber is abundant and cheap.

The Memphis & Charleston Railroad and the Sheffield & Birmingham Railroad are now in operation into Sheffield. The Louisville & Nashville Railroad Co. is now extending its Nashville, Florence and Sheffield division, which will be completed to Sheffield before July 1st, 1888. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

ALFRED H. MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

Anniston

THE CENTER OF
Iron and Cotton Industry
AND MINERAL WEALTH.

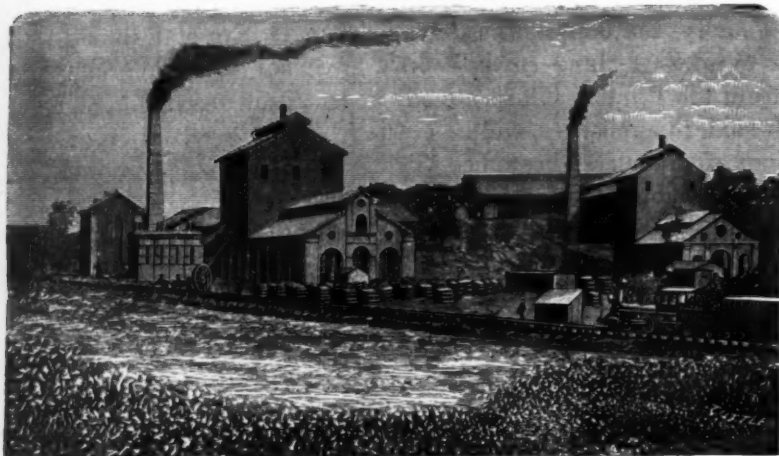
"The Model City of the South."

IT IS

The Profits of Labor only that can add to the wealth and prosperity of a nation or community. It is this only that can make business successful and profitable, sustain and add to the value of real estate.

WHERE

Nature's resources are greatest, where nature's capital in rich agricultural lands, and where iron, coal and other useful minerals are most abundant, most accessible and of superior quality for all purposes, there will capital find its safest investment, largest returns and labor reap its richest reward. It is to the Anniston District where the best professional mining engineers and experts of the United States declare the great center of the iron industry of the South will drift, where its manufacture will be most permanent and profitable, and where ores in the greatest abundance and accessibility exist, and where they will be most easily mined, that this applies.



WOODSTOCK FURNACES—ANNISTON.

The Development of the Past Fifteen Years

Confirms all this, and every year convinces the experts of the correctness of their judgment. It is no longer opinion based on scientific and practical education; it is a fact that is clearly and successfully demonstrated, so that the visitor to the Anniston District can see at every step. The four iron furnaces that have been so long and successfully operated, and the new plant now being erected, and rapidly approaching completion, which will be capable of producing one hundred thousand tons of pig iron a year, demonstrate that

NOWHERE IN THE SOUTH

Has the iron industry been so profitable and so successful, or been established on so permanent a basis, and of no district is this so universally conceded by all, while nowhere else have arrangements been perfected and already established on so complete a scale to work the crude iron into higher branches of manufacture to increase its value, and to bring into the district the profits of skilled labor. THE GREAT CAR WHEEL WORKS OF NOBLE BROS. & CO., their rolling mill and steam forge and machine shops, and the Alabama Car Works, have been absorbed by the

UNITED STATES ROLLING STOCK COMPANY,

With a capital of \$4,000,000, for the purpose of adding to and enlarging the entire plant to build TWENTY CARS A DAY. Everything that goes into the creation of a car, except the tin for the roof and the wire nails, will be created from Anniston's crude material by her labor and skill. Fifty tons of wheel iron will be made into car wheels daily, twenty tons into car axles, fifty tons of pig iron into car and other castings, and fifty tons into bar iron and bolts, making nearly ten thousand dollars per day added to the wealth of the country by profitable labor converting nature's capital to the use of man. This company have a capital of \$4,000,000, and their Anniston works will represent a cash outlay of \$1,000,000. One thousand skilled mechanics will be employed as soon as the great enlargements under way can be completed.

THE STEEL BLOOMARY

Consumes and increases the value of twenty tons of pig iron per day, while the Pipe Foundry converts to the use of man TWO HUNDRED TONS OF PIG IRON PER DAY in one of the largest and best planned and most convenient labor-saving works on this continent. The Foundry of Murray & Stevenson, Engine and Machine Works of Pinder & Co., and Boiler and Sheet Iron Works of J. & D. Noble, all add to the consumption of crude material by the creation of finished work.

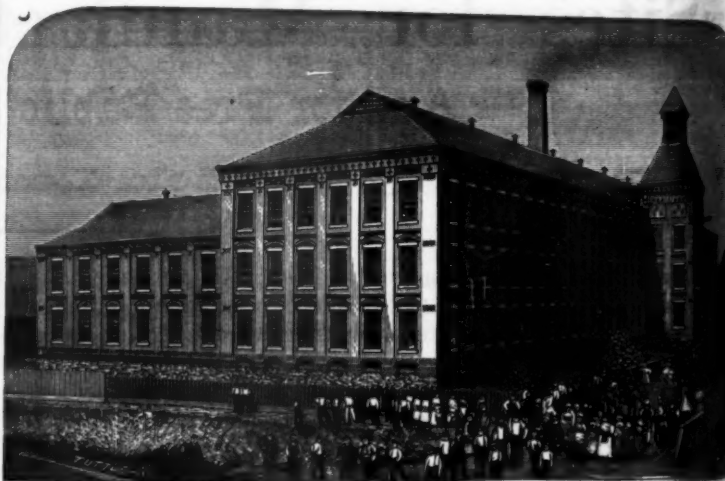
NOR IS IT TO IRON ALONE

That Anniston relies for increase of wealth and population. The Cotton Factory, with eleven thousand seven hundred spindles and three hundred and seventy-five looms, employing over three hundred and fifty operatives, adds greater value to the products of agriculture by converting six thousand bales of cotton into cotton cloth. The immense ninety-inch Morse Cotton Compress, with its brick warehouses, is fast making Anniston a cotton market and commercial center, and aiding its wholesale and retail merchants to extend and hold the trade of the country tributary to Anniston that its system of railroads has opened to them. The Georgia Pacific, the East Tennessee, Virginia & Georgia Railroad systems,

Give Direct Communication and Through Rates

To all parts of the country, while the Anniston & Atlantic Railroad, built by Anniston capital to open up new agricultural and mineral resources, gives Anniston, by connection with the Central of Georgia system, communication with the Atlantic sea coast and the new Anniston & Cincinnati Railroad, built and owned by Anniston citizens, opens up new resources and connections, and a shorter line with the great Northwest.

The proposed extension of the Anniston & Atlantic Railroad to Bloston will give another and shorter line to the great Cahaba Mines, producing the very best coal for domestic and manufacturing purposes in the South. Forty thousand acres of these coal lands, upon which a million and a half dollars have been lately spent in opening new mines and building several hundred coke ovens, ALL OWNED AND CONTROLLED BY ANNISTON CAPITAL, and developed to mine and manufacture three thousand tons of coal and coke per day, secures to Anniston for generations to come a full and certain supply of cheap fuel for all her industries, operated where a rich agricultural country can feed a manufacturing and commercial people, and where the



ALABAMA MANUFACTURING COMPANY'S COTTON MILL—ANNISTON.

Best, Healthiest and Most Invigorating Climate in the World,

With mountain air and pure water, and an elevation of nine hundred feet above tide water, insures the health and comfort of the workman and his family; where health and comfort stimulate and lighten labor, and secure to it and its industries the reward due to both. It is these advantages which have been given by nature that enabled Anniston's citizens to create her past and present prosperity, and which secure her future. It is that they may participate in and avail themselves of these advantages that Anniston invites NEW CAPITAL AND TALENT AND ENERGY from all sections. We invite all to come and see, and on the spot to judge for themselves of Anniston's great resources and possibilities. The comfort and quiet of the famous Anniston Inn will make a visit to our city a treat and pleasure. Any information, attention and courtesy will be given and shown by addressing or applying to the

ANNISTON CITY LAND CO., Anniston, Ala.

The VICTOR TURBINE

Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

| Size of Wheel. | Head in Ft. | Horse Power. | Per Ct. Useful Effect |
|----------------|-------------|--------------|-----------------------|
| 15-inch. | 15.00 | 30.17 | .9000 |
| 17 1/2-inch. | 17.90 | 36.55 | .9000 |
| 20-inch. | 18.31 | 48.00 | .9000 |
| 25-inch. | 17.90 | 68.00 | .9004 |
| 30-inch. | 11.65 | 82.54 | .8976 |

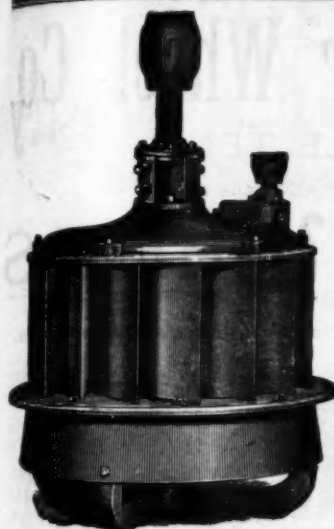
WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material.

THE VICTOR WHEEL IS PARTICULARLY ADAPTED TO SETTING ON

HORIZONTAL SHAFT, Dispensing Entirely
With Gears.
STILWELL & BIERCE MFG. COMPANY

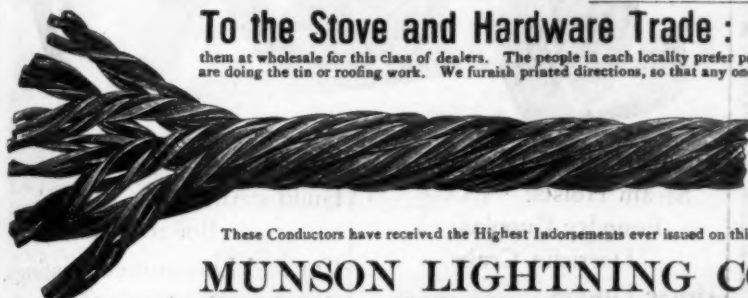
Send for new catalogue. **DAYTON, OHIO, U. S. A.**



ESTABLISHED 1850.

To the Stove and Hardware Trade:

THE LIGHTNING ROD TRADE has undergone a change in the past few years. Formerly men with wagons traveled over the country, but now these men have almost disappeared. The business of erecting rods on houses has passed into the hands of tinners, hardwaremen and builders, and we simply manufacture them at wholesale for this class of dealers. The people in each locality prefer patronizing a home firm, and you can just as well sell them their Lightning Conductors at the same time you are doing the tin or roofing work. We furnish printed directions, so that any one can put them up without difficulty. We also manufacture all kinds of



Weather Vanes, Glass Balls, &c.

These Conductors have received the Highest Indorsements ever issued on this class of goods, and are therefore standard. Write for prices and inclose 10 cents in stamps for samples.

MUNSON LIGHTNING CONDUCTOR CO., Indianapolis, Ind.



Keep Your Belts From Slipping

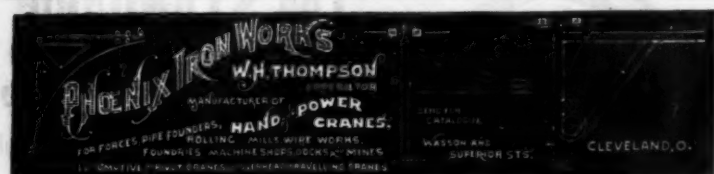
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by using

FRICION COVERING FOR PULLEYS.

Satisfaction Guaranteed.
Easily Applied.
No Rivets. Effective.

National Pulley Covering Co.

BALTIMORE, MD.



WALKER MANUFACTURING CO.

Shafting, Hangers,
PULLEYS.

PULLEY CASTINGS
AND MACHINE-MOULDED
GEARING

A Specialty.
Cleveland, Ohio.

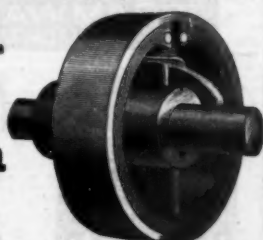
Estimates furnished. Write for
Gear and Price-Lists A.



Hill Clutch Works,

Cleveland, O.

HILL
Friction
Clutch.



Shafting, Hangers.

Castings of every
Description made.
Stationary, Distillery
Mill and Boiler Work.

JNO. N. MARQUETTE, 118 W. Falls Ave., {Near Pratt Street} **BALTIMORE, MD.**

MILNER & KETTIG,

Manufacturers' and Plumbers' Supplies.
Write for Catalogue.
Prices guaranteed as low as any house in this line in the United States.

BIRMINGHAM, ALA.

THOMAS V. HALL, Mechanical Engineer.

A. S. CORRELY.

THOMAS V. HALL & CO.
Manufacturers' Agents for Sale of Complete Outfits in Machinery

At Manufacturers' Prices, to Fully Equip the Following Plants:

Canning Factories, Spoke, Hub and Handle Factories, Furniture Factories,
Cotton Mills, Incline Plane and Cable Railroads, Saw and Shingle Mills,
Brick and Tile Works, Flouring and Feed Mills, Coal Mine Plants,
Grain and Coal Elevators, Soap and Candle Works, Water Works Plants.

Hand, Steam and Hydraulic Passenger and Freight Elevators, Dumb Waiters, Also, Steam-Heating Apparatus, Arc and Incandescent Electric Light Plants and Electric Motors.

Construction Drawings furnished with all outfits free of charge. Personal superintendence at reasonable rates when desired. Correspondence solicited. Send for prices. Address all communications to

THOMAS V. HALL & CO., Mechanical and Constructing Engineers.

Office, Room 23 Montague Block, S. E. cor. 8th & Chestnut sts. P. O. Box 242. CHATTANOOGA, TENN.

The Only Manufacturers of Rawhide Belting in the Country.

The Chicago Rawhide Mfg. Company,

MANUFACTURERS OF

RAWHIDE BELTING, LACE LEATHER,

★ ROPE, LARIATS, FLY-NETS, ★

Picker Leather, Stock and Farm Whips, Washers, Horse Straps, Horse Strings, Halters and other Rawhide Goods of all kinds, by Krueger's Patent.

This Belting and Lace Leather is not affected by steam or dampness; has more grip than any other; never becomes hard; is stronger, more durable and the most economical belting made. Especially adapted for the Southern trade on account of its resistance to moisture. The Rawhide Rope for Round Belting Transmission is SUPERIOR TO ALL OTHERS.

73 & 75 Ohio Street, CHICAGO, ILL.

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MANUFACTURERS



**MACHINE AND CAR BOLTS,
KEYSTONE BOILER RIVETS,**

MADE IN SOLID DIES.
COLD PUNCHED, CHAMFERED, TRIMMED &
DRILLED SQUARE & HEXAGON NUTS.

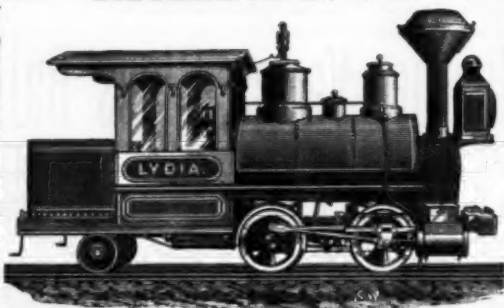
Bridge Rivets, WASHERS,
Split and Tank and Coopers'
Single Keys. RIVETS.

PHILADELPHIA, PA.

ESTABLISHED IN 1868.

The Richmond Locomotive & Machine Works,
RICHMOND, VA.

SUCCESSORS TO THE
Tanner & Delaney Engine Company.
Having added to their extensive plant a large
number of special tools, are prepared to build
of the latest and most approved designs: Light
Locomotives, Passenger, Freight, Tramway,
Noiseless Street Motors and Mine Engines.



Also Portable Road Locomotives, the only succe-
ful device of the kind made. Engines, Stationary
and Portable, as to gas, horse-power, Stationary
Standard and Special, as to gas, horse-power,
Gas, Water, Creosoting and other Heavy Ma-
chinery. Correspondence invited. Catalogues,
specifications, photographs and estimates fur-
nished on application.

STEEL RAILS

PENNSYLVANIA

Standard Sections
Light Sections
Street Rails

Fish Plates,
Frogs, Switches

STEPHEN W. BALDWIN
SALES AGENT

STEEL COMPANY

50 to 80 lbs. per yard
16 " 45 " " "
30 " 88 " " "
Bolts & Nuts,
and Crossings.

NO. 2 WALL STREET
NEW YORK N.Y.

16 lbs. Full Size.

BUCYRUS FOUNDRY & MFG. CO.

BUCYRUS, OHIO.

Builders of—

Steam Shovels,

Steam Dredges,

WRECKING CARS.

THE STEWART & MATTSON MFG. CO.

Railroad Car Trimmings & General Brass Ship Work.

Car Bearings and Ingot Metal, Switch and Car Locks, Fine Brass Castings, Brass Special Screws and Bolts,
Car Trimmings Repaired, Repolished, Oxidized and Plated.

Office and Factory, Nos. 2042 to 2052 N. 10th St., PHILADELPHIA, PA.

Railway Equipment, Pig Iron, Coal and Coke.

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J. G. BRILL CAR CO. NEW ALBANY RAIL MILL CO.

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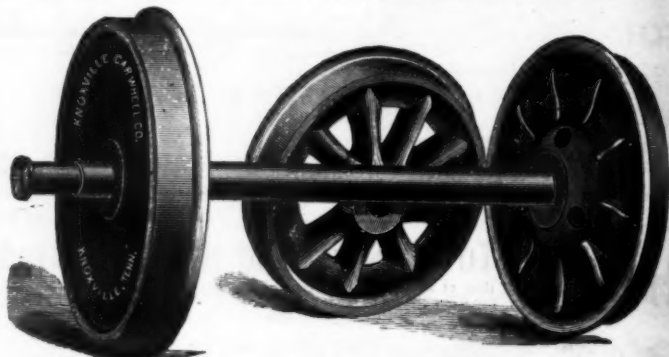
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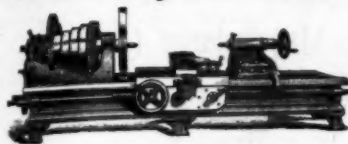
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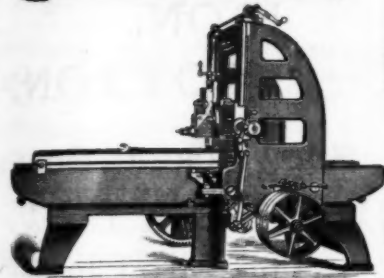
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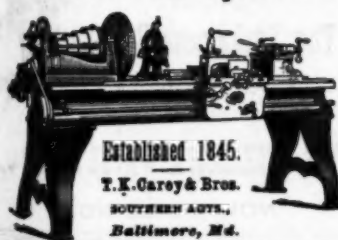
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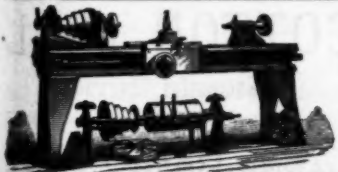


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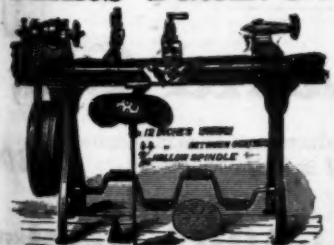
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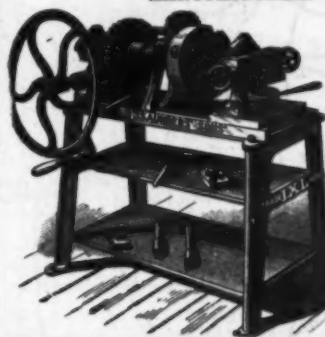
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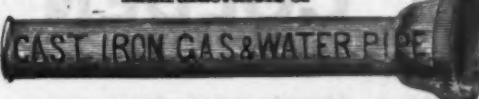
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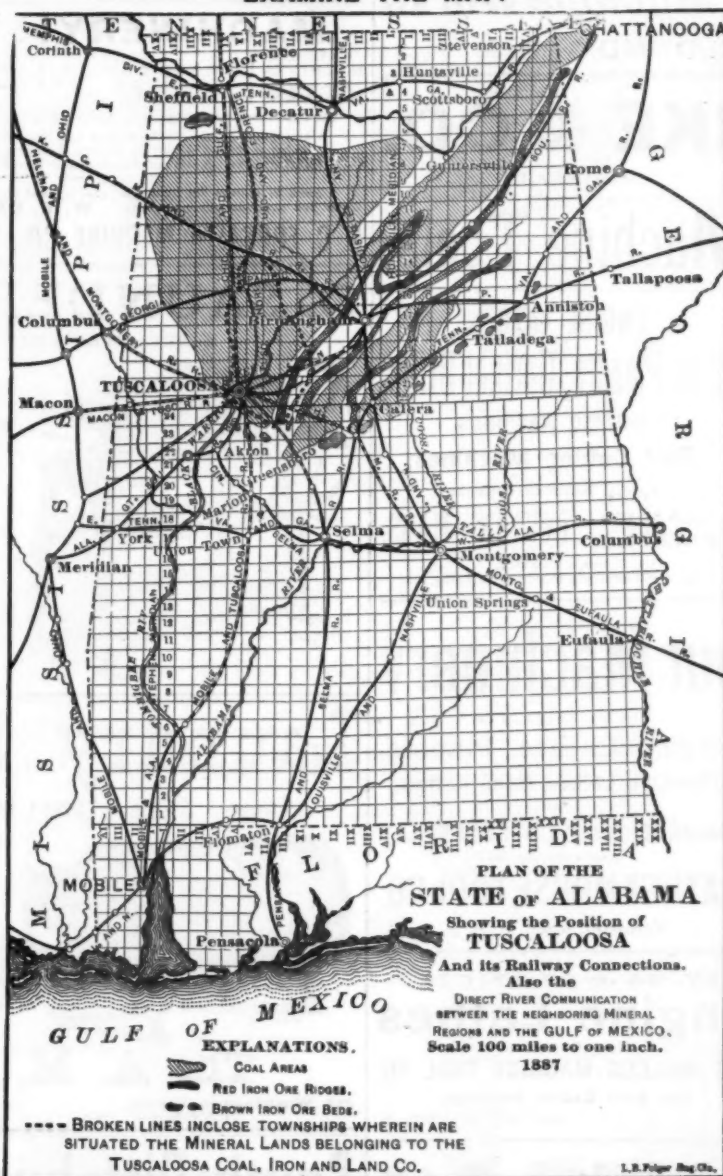
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CONSTRUCTION DEPARTMENT

PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Abbeville—Courthouse.—A courthouse will be built by Henry county.

Anniston—Hotel.—Cobb & Moore have purchased a site corner Teath and Wilmer streets to build a three or four-story brick hotel, 60x120 feet. Plans are being prepared and work will soon be commenced.

Anniston—Ice Factory.—The Anniston Ice Manufacturing Co. will increase the capacity of their ice factory from 3 to 10 tons daily, previously mentioned. They will hold a meeting on May 17 to increase their capital stock to \$30,000.

Anniston—Stove Works.—A \$50,000 stock company has been formed to establish stove works. Samuel Noble is president.

Anniston—Cotton Press Factory.—C. G. Wilson, of Milledgeville, Ga., will make efforts to organize a company to manufacture cotton presses.

Bessemer—Iron Furnaces.—It is rumored that two more iron furnaces will be built.

Birmingham—Trunk Factory.—Mr. Lorenzo has recently started the manufacture of trunks.

Birmingham—Roundhouse.—The Columbus & Western Railroad Co. (office Columbus, Ga.) will build a roundhouse.

Birmingham—The brass foundry reported last week is owned by Valentine, Gibb & Co. They contemplate enlarging it.

Birmingham—Electric Light Plant.—The Birmingham Safe & Lock Co. will erect an electric light plant.

Birmingham—Sand.—J. F. Baldwin will mine sand.

Birmingham—Iron Works.—The Linn Iron Works, owned by the Tennessee Coal, Iron & Railroad Co., are reported to be moved to Ensley.

Birmingham—Depot.—A union depot is reported to be built at Ensley by the Georgia Pacific and other railroad companies.

Birmingham—Mineral Wool Factory.—The Williamson Iron Co. will start the manufacture of mineral wool.

Brewton—Spoke, Handle and Bucket Factory.—Negotiations are pending for the erection of a spoke, handle and bucket factory.

Choctaw Corner—Wagon Factory.—J. Stadelbilt will start the manufacture of wagons, and wants price-lists and catalogues of spoke lathes, band saws, boilers and engines.

Columbia—Courthouse.—A courthouse will be built for Henry county.

Cross Plains—Railroad.—The East & West Railroad Co. will make extensive improvements to their road.

Dayton—Dummy Railroad.—R. W. Price, John F. Watkins & Co., W. W. Bruce and others contemplate building a dummy railroad to Faunsdale, 8 miles, and have secured the right of way.

Decatur—Brick-yard.—Sharkey & Co. have started a brick-yard.

Decatur—Brick Works.—The Moulthrop & Stevens Brick & Tile Co. will double the capacity of their brick works lately started.

Decatur—Horse-nail Factory.—The Southern Horse Nail Co. have let the contract for building their factory lately mentioned to T. N. Anderson. He will commence work at once.

Decatur—Saw Mill.—C. Farris, of Illinois, will build a saw mill.

Eufaula—Cotton Factory.—The Eufaula Manufacturing & Improvement Co. are making efforts to have a cotton factory built.

Florence—Depot.—Arrangements have been made, it is said, for building the union depot previously reported. W. B. Wood can give information.

Florence—Paint Factory.—The Florence Paint Co. are receiving machinery for their factory previously reported.

Gadsden—Railroad.—William H. Case, chief engineer Tennessee & Coosa Railroad Co., will receive until May 10 proposals for grading, masonry and bridging on the unfinished portion of the old road from Gadsden to Guntersville, 36 miles, and the 40-mile extension to Huntsville, previously reported.

Huntsville—Fertilizer Factory.—The Huntsville Cotton-Seed Oil Mill Co. will add a fertilizer factory to their oil mill.

Lively—Brewery.—It is reported that Willaner & Koennecker are enlarging their beer brewery.

Manchester—Brick-yard.—Mr. Privett will start a brick-yard.

Montgomery—Lumber Mills.—W. H. Wilson, of Harrison, Mich., and W. J. Vankirk, of Pensacola, Fla., have been prospecting for a site to build one or more lumber mills.

Montgomery—Sewerage System.—The contract for building the Central division of the sewerage system, previously reported, has been awarded to Howland & Ellis at \$44,800. The city council have issued a second lot (\$75,000) of the sewerage bonds.

Montgomery—Saw Mill.—Belsar & Parker have lately started a saw mill along the Montgomery & Florida Railroad.

Peaceburg—Saw Mill.—Kelton & Wakefield have located a saw mill.

Selma—Saw Mill.—Vance Bros. will erect a large saw mill. Machinery is reported as ordered.

Sheffield—Sewerage System.—The city council contemplate establishing a sewerage system.

Sheffield—Coke Ovens, &c.—The Sheffield & Birmingham Coal, Iron & Railroad Co. will issue \$400,000 more of bonds for building coke ovens, branch railroads, &c., previously reported.

Sheffield—Water Works.—The Sheffield Coal, Iron & Land Co. contemplate greatly enlarging their water works.

Sylacauga—Reservoir.—A reservoir will probably be built to furnish water for fire protection.

Talladega—Depot.—The East Tennessee, Virginia & Georgia Railroad Co. (office, Knoxville, Tenn.) are preparing to build a new depot.

Talladega—Corn Mill.—S. M. Jemison & Son, reported last week as overhauling their corn mill, have built an entirely new mill.

Tecumseh—Iron Furnace.—The Tecumseh Iron Co. have blown out their furnace to make repairs.

Troy—Oil Mill, Ginnery, Bagging Factory, &c.—The Troy Fertilizer Co. will add a cotton-seed oil mill, acid chambers and a cotton ginnery to their fertilizer factory at a cost of probably \$50,000 or \$75,000. They

contemplate starting the manufacture of bagging and are making investigations.

Tuskaloosa—Building.—F. P. Turner will erect a three-story office building, 40x100 feet.

Tuskaloosa—Opera House.—C. J. Geary will shortly begin work on an opera house.

Tuskaloosa—Ice Factory.—The Tuskaloosa Ice Manufacturing Co. has been organized and will erect the factory reported last week. E. C. Lyles, of New Orleans, La., has the contract for its construction.

Tuskaloosa—Electric Light Plant.—The Tuskaloosa Electric Light & Gas Co. has been organized to erect an electric light plant. W. C. Harris, Jr., has the contract and will begin work on the plant at once.

Verbena—Railroad.—The Pratt Saw Mill Co. will extend their road.

ARKANSAS.

Arkansas.—It is reported that the Arkansas Land & Improvement Co. is being formed at Philadelphia, Pa.

Arkansas—Saw Mill.—Charles E. Irwin, of Bay City, Mich., contemplate erecting a saw mill at some point in Arkansas.

Bear—Mining.—The Guatemala Mining Co. has been chartered by A. M. Beam, R. B. Fulton, R. D. Jones, John A. Tillman and others. The authorized capital stock is \$500,000. R. B. Fulton is president.

Camden.—The Camden Building & Loan Association has been organized with W. F. Avera as president.

Camden—Iron Foundry.—Edwin Clifton is building an iron foundry.

Clarksville—Printing.—The Clarksville Printing Co., capital stock \$1,500, has been chartered.

Dardanelle—Railroad.—The Dardanelle & Western Railroad Co., capital stock \$1,700,000, has been chartered to build a railroad from Dardanelle to Black Fork, 85 miles. J. A. Woodson is president; T. J. Darragh, vice-president; W. H. Halleburton, secretary, and C. T. Walker, treasurer.

Dardanelle—Oil Lands.—The American Well Drilling Co., of Louisville, Ky., will sink an oil well in Scott county for T. J. Darragh, J. M. Dill and others.

Hackett City—Lumber Mill.—It is reported that considerable machinery has been added to the mill of the Bloomberg Lumber Co.

Hot Springs—Church.—The Methodists will build a new church.

Hot Springs—Mining, &c.—The Forsman Mining & Reduction Co. has been chartered by J. Forsman, B. Gross, Charles E. Crockett, H. Moscovitz and others. Mr. Forsman is president.

Little Rock—Building.—William J. Turner will erect a large two-story building.

Little Rock—Nursery.—The Arkansas Nursery Co., capital stock \$50,000, has been incorporated with Howard Adams as president.

Morrilton—Jail and Church.—R. S. Truitt has contracted to build a jail to cost \$8,000, and a church for the Methodists to cost \$9,000.

Nashville—Canning Factory.—George M. Clark is organizing a company to start a canning factory to cost about \$10,000.

Scott County—Oil Lands.—The Standard Oil Co. are reported as leasing oil lands.

FLORIDA.

Bridgeport—Shingle Mill and Brick-yard.—Mitchell Renz will start the shingle mill reported last week, and contemplates starting the brick-yard.

Daytona—Ice Factory.—F. W. Bush, of Musfield, Ohio, has been prospecting with a view to building a 5-ton ice factory.

Hampton—Saw Mill.—Farmer & Keirulff are building the saw mill reported last week. It is 30 horse-power.

Hudson—Hotel.—Charles Bucki, of Ellaville, will, it is stated, build a hotel to cost \$25,000.

Jacksonville—Broom Factory.—A large broom factory will be started by Martin McHale, of Gallipolis, Ohio.

Leesburg—Hotel.—There is talk of building a large hotel.

Orlando—Electric Light Plant.—The Orlando Gas Co. have made a proposition to erect an electric light plant.

Orlando—The Orlando Loan & Trust Co., capital stock \$100,000, has been organized with C. E. Grannis as president.

Palatka—Steam Laundry.—G. M. Smith will start a steam laundry.

Palatka.—Colwell & McWalters have started the manufacture of a cleansing compound.

Palatka—Depot.—The Jacksonville, Tampa & Key West Railroad Co. (office, Jacksonville) have purchased a site to build a union depot.

Palatka—Planing Mill.—Vincent & Son will move their planing mill to another site and enlarge it.

Paola—Hotel.—The contract to build a brick hotel has been let.

Quitman—Cigar Factory.—E. F. Pitman will start a cigar factory.

Sanford—Roundhouse.—The Jacksonville, Tampa & Key West Railroad Co. (office, Jacksonville) will build a roundhouse.

St. Augustine—Buildings.—B. Genovar contemplates erecting a block of buildings, and John G. Long will erect at once a block of four-story buildings.

St. Augustine—Hotel.—Vedders & Henderson will build the 100-room hotel previously mentioned, and have commenced work on the foundations.

St. Augustine—Hotel.—Beck & Leonard will build a six-story addition to their hotel.

St. Augustine—Hotel.—M. Palmer will build an addition to the Magnolia Hotel.

St. Augustine—Hotel.—The Casa Monica is to be improved, new kitchen built, etc.

St. Augustine—Laundry.—McGaire & McDonald have contracted to erect a two-story building, 36x180 feet, to be used as a steam laundry.

St. Augustine—Residence.—O. B. Smith contemplates building a residence to cost \$10,000.

Wakulla—Railroad.—Negotiations are being made with the Florida Railway & Navigation Co. (office, Fernandina) to build a 12-mile branch road to Wakulla.

GEORGIA.

Albany—Foundry and Machine Shop.—T. Patterson & Sons are adding new machinery to their foundry and machine shop.

Atlanta—Electric Light Plant.—An electric light plant is being erected at the Kimball House.

Atlanta—Cold Storage Warehouse.—The Atlantic Automatic Refrigerator Co., previously reported, are receiving machinery for their plant.

Athens—Bobbin Factory.—John H. Newton contemplates doubling the capacity of his bobbin factory.

Augusta—Electrical Railroad.—An electrical railroad will probably be built at the Augusta National Exposition grounds, Mr. Ryckman, manager, can give particulars.

Bremen—Iron Mine.—Charles J. Jahan has sold the iron mine previously reported to Eastern parties, who are now developing it.

Brunswick—Sewerage System.—Plans are being prepared for a sewerage system. The mayor can give information.

Cartersville—Furniture and Coffin Factory.—W. C. Edwards, J. E. Hall and James Uren will start the furniture and coffin factory reported last week.

Cartersville—Planing Mill.—Galloway & Freeman contemplate adding some machinery to their planing mill.

Cartersville.—John T. Norris, H. H. Hall, John J. Calhoun and others have incorporated the North Georgia Development Co. The capital stock is \$4,000, with privilege of increasing to \$100,000.

Cedartown.—A building and loan association has been formed by A. Richardson and others.

Cedartown—Street Railroad.—A street railroad is reported to be built.

Cedartown—Planing Mill.—J. W. Duncan and J. H. Wright will erect the planing mill lately mentioned, and are purchasing machinery. Have purchased a site.

Cedartown—Warehouse and Church.—R. A. Adams & Co. have purchased a site, 55x200 feet, to build a brick warehouse. The Methodists will spend \$3,500 in improving their church.

Cedartown—Paint Mill and Slate Factory.—It is reported that Thomas P. Williams contemplates establishing a paint mill and a factory for manufacturing slates, etc.

Cedartown—Tannery.—There is talk of a tannery being started.

Columbus—Factory.—A factory is being started to manufacture the automatic sprinkler invented by John Hill.

Cox—Sash, Door and Blind Factory.—D. Rhodes contemplates erecting a sash, door and blind factory.

Dalton—Gas Works.—Parties have contracted to build gas works and have them in operation within 6 months. W. L. Lampkin can give information.

Dowdy—Saw and Planing Mill, &c.—A saw and planing mill with lath and shingle machinery attached is to be built. J. W. Seymour can give particulars.

East Point—Factory.—It is stated that the Farmers' Farm Improvement Co. will enlarge their factory.

Edgewood—Brick-yard.—William Plummer contemplates adding machinery to his brick-yards, and wants to purchase a "Lone Star" brick machine.

Emanuel County—Railroad.—Jesse Thompson & Co., of Augusta, are preparing to extend their railroad.

Gainesville—Cotton Compress.—The Gainesville Compress Co., previously reported, have organized with J. P. Canning as president, and H. B. Smith, secretary and treasurer. Their compress will be in operation for the next crop.

Gainesville—Mining.—N. F. Howard, William J. Worley and John A. Howard, of Dahlonega, and others have formed a company to develop mineral land along the Richmond & Danville Railroad. They will probably open a plumbago mine first.

Grady—Ochre Mine.—Mr. Cody will, it is reported, develop an ochre mine.

Harmony Grove—School.—The town has voted to issue \$8,000 of bonds to build a school. The mayor can give information.

Macon—Electric Light Plant.—Arrangements are being made for the erection of an arc and incandescent electric light plant.

Macon—Railroad.—A. O. Bacon, John C. Rutherford and Minter Wimberly have chartered the East Tennessee & Jacksonville Railroad Co. to build the extension of the East Tennessee, Virginia & Georgia Railroad from Jesup to the Florida State line, previously reported. The capital stock is \$1,000,000. A similar company has been formed in Florida, as lately stated, to continue the road to Jacksonville.

Macon—Cottages.—Mrs. William Cave will build a number of cottages.

Macon—Cold Storage Warehouse.—The Refrigerator Construction Co., of Atlanta, previously reported, will probably erect their next cold storage plant at Macon.

Macon—Building.—The contract for completing the interior work of the government building has been let to McCarty & Baldwin, of Washington.

Macon—Depot.—The Macon & Covington Railroad Co. will build their depot corner Fourth and Poplar streets if certain privileges are granted.

Monroe—Oil Mill and Guano Factory.—If the cotton factory lately mentioned is built several parties will erect a cotton-seed oil mill and a guano factory to cost \$50,000.

Monticello—Hotel.—There is talk of building a 50-room hotel.

Newnan—Depot.—The Atlanta & West Point Railroad Co. (office, Atlanta) will shortly build a passenger depot.

Rome—Synagogue.—The Young Men's Hebrew Association, L. M. Fink, president, contemplates building a synagogue.

Rome—Packing Factory.—The Garlock Packing Co. have decided to establish their factory for manufacturing packing at Rome, and have commenced work on their building.

Rome—Planing Mill, Mattress Factory, &c.—W. W. McCran, Elbert McGhee and others will erect a planing mill, mattress and excelsior factory, etc., and have ordered machinery. They will be known as the Rome Manufacturing Co.

Sandersville—Railroad.—The Sandersville & Tennille Railroad Co. will, it is stated, relay their road (3½ miles long) with new rails.

Savannah—Lumber Mill.—McDonough & Co. will, it is said, build a lumber mill.

Savannah.—The Southside Land & Investment Co., capital stock \$10,000, has been chartered by John R. Dillon and others.

Savannah—Turpentine Distilleries, &c.—Charles S. Ellis, John R. Young, Charles B. Parker, William M. Beech and others have incorporated the Pine Investment & Manufacturing Co., capital stock \$25,000, to deal in naval stores, operate turpentine distilleries, etc.

Savannah—Ice Factory.—The name of the company reported last week as to erect an ice factory is the Savannah Artesian Ice & Storage Co. The corporators are Samuel P. Hamilton, Horace A. Crane, John Flannery, J. F. Kavanaugh and others.

Savannah—Street Railroad.—The Montgomery Street Car Line will be extended.

Savannah—Street Railroad.—Dr. Falligant will form a company to build a street railroad.

Senoia—Guano Factory.—The Senoia Fertilizer & Manufacturing Co. will add machinery next fall for manufacturing guano.

Tallapoosa—Wagon Factory.—Mr. Cole will probably start the manufacture of farm wagons, etc.

Tallapoosa.—The Southern Land, Investment & Commission Co., capital stock \$50,000, has been chartered by A. J. Simpson and others.

Tallapoosa—Water Works.—Efforts are being made to have a system of water works built.

Washington—Candy Factory.—Mr. Scheidman will start a candy factory and bakery.

KENTUCKY.

Ashland—Saw Mill.—A large saw mill will probably be built.

Fordsville—Stave Factory.—The Cincinnati Cooperage Co., of Cincinnati, Ohio, will start a stave factory about 3 miles from Fordsville.

Frankfort—Bills have been introduced in the legislature to incorporate the Wilson Ferry Turnpike Road Co. and the Carbon Coal & Iron Co.

Frankfort.—The bill previously reported as introduced in the legislature to incorporate the Frankfort & Lawrenceburg Railroad has become a law.

Hopkinsville—Bank.—Daniel Grinter contemplates erecting a large bank building.

Hopkinsville—Building.—A building to cost \$7,000 is reported to be erected by the Chautauquan Association.

Lexington—Laundry.—Martin & Navin will start a steam laundry.

Louisville—Brewery.—John Rohrman is building a beer brewery at Hill and Seventh streets.

Louisville—Building.—A large office building is to be erected on Main street. The Kentucky Title Co. can give information.

Louisville—Coffin Factory.—The Louisville Coffin Co. have completed their large new factory, previously reported. It is five stories, 140x120 feet.

Louisville—Cotton Mill.—It is stated that arrangements have been completed for establishing the large cotton factory previously mentioned as projected.

Louisville—Factory.—The Fischer-Leaf Co., manufacturers stoves and mantles, will erect a three-story factory, 40x50 feet, to cost \$4,000.

Louisville—Hotel.—A company is being formed to build a large hotel corner Eighth and Main streets. The secretary Commercial Club can probably give information when anything definite is done.

Louisville—Jeans Clothing Factory.—A company is being formed to extensively manufacture jeans clothing.

Louisville—Kenneth McDonald contemplates starting the manufacture of a device for preventing water freezing in pipes.

Louisville—The Indiana Electric Service Co., capital stock \$100,000, has been organized with John T. Gathwright as president. The company will operate in Indiana.

Louisville—Water Works.—Sooy Smith & Co., of New York, have thrown up their contract for the engine house, engine foundation and caisson complete, and the inlet and river work, lately mentioned as awarded to them at \$172,189.55.

Nicholasville—Railroad.—Jessamine county has voted a subscription of \$150,000 to the Louisville Southern Railroad.

Paris—Water Works.—The contract with J. E. Thompson for building the water works, previously mentioned, has been ratified by a popular vote.

Pineville—Brick-yard.—T. P. Brawner will start a brick yard.

Shelbyville—Tobacco Factory.—The Shelby Tobacco Co., lately chartered, will probably build a plug tobacco factory.

Sturgis—Flour Mill.—A flour mill is being built by D. A. Brooks, Jr. & Co. They want machinery with a daily capacity of about 60 or 70 barrels.

LOUISIANA.

Amite City—Saw Mill.—The Gullett Gin Co. are adding some new machinery to their factory, and erecting a new saw mill.

Lake Charles—Brick and Tile Works.—John Burnett contemplates, it is said, establishing brick and tile works.

MARYLAND.

Baltimore—Envelope Factory.—D. W. Glass, D. D. Mallory, George S. Hunt and others will form a company with a capital stock of about \$100,000 to manufacture envelopes extensively.

Baltimore—Clothing Factory.—The Co-operative Clothing Manufacturing Co., capital stock \$25,000, has been chartered by J. Louis Brown, Nathan Kaufman, Harry W. Ganster and others.

Baltimore—Depot, &c.—The Drum Point Railroad Co. have purchased about 7 acres of ground in Southwest Baltimore to build depots, etc.

Baltimore—Wood-working Factory.—Johns & Webster have re-established their wood-working factory on West Pratt street, previously mentioned as burned.

Baltimore—Publishing.—The Merchants' & Manufacturers' Journal Co., capital stock \$15,000, has been chartered by Theodore F. Wilcox, John W. Marshall and others.

Baltimore—Railroad.—The Maryland Central Railroad Co. will spend \$25,000 in repairing their road and purchasing 25 freight cars.

Baltimore—Buildings.—F. W. Maldein will erect 13 two-story brick houses on Warner street; Henry Westfall, 4 two-story houses on Eden street near Oliver, 21 on Barney street near Charles, and 7 on Charles street near Barney; Boston Fear, 7 two-story brick buildings on Mulberry street, and 7 on Pierce street; Edward W. Ellis, 3 two-story buildings on Dexter street, and Charles Bender, 3 two-story buildings on Union street.

Frederick—Electric Light Plant.—The city will decide by a popular vote on May 2 whether or not to purchase an electric light plant to cost \$14,500 from the Thompson-Houston Electric Light Co.

Frederick—Electric Light Machinery.—Louis McMurray contemplates putting electric light machinery in his canning factory.

Hagerstown—Electric Light Plant.—The Schuyler Electric Light Co., of Middletown, Conn., have contracted to put in an electric light plant, previously reported. It will have a capacity for about 100 arc and 2,500 incandescent lights.

Jefferson—Cigar Factory.—A cigar factory has been started by G. M. Culler.

Muirkirk—Iron Furnaces.—Chas. Coffin will put his iron furnace in blast on April 30. It has been idle for 6 months.

Pekin—Coal Mine.—A new mine has lately been opened by the Atlantic & George's Creek Coal Co. (office, Baltimore).

Rockville—Church.—The Catholics will build a new church.

Sharon Station—Canning and Can Factories.—Henry Horn, of Baltimore, will start a canning factory and a can factory.

Union Bridge—Copper Mine.—John W. Dixon will develop a copper vein on the land of A. Graham.

Wilna—Canning Factory.—A canning factory is being built by George W. McComas.

Georgetown, D. C.—Electric Light Plant.—D. W. Thompson and others contemplates erecting an electric light plant.

Washington, D. C.—Residence.—W. F. Lipscomb has the contract to build the residence for Senator Sawyer, previously reported. It will cost about \$80,000. Work has been commenced.

Washington, D. C.—Bank.—The Bank of Washington will soon erect a new bank building, two stories, 40x86 feet, to cost about \$54,000. D. J. Macarty has the contract.

Washington, D. C.—A bill has been introduced in the United States Senate to incorporate the Brightwood Railroad Co.

Washington, D. C.—Buildings.—James C. Sprigg will erect 3 brick buildings on Seventeenth street to cost \$4,500; S. H. Walker, a brick buildings on B street to cost \$6,000; Robt. S. Chew, a \$6,000 brick dwelling at 1921 H street, N. W.; Edward Walz, 4 brick dwellings on K street to cost \$8,000; Mrs. Caroline Gibbons, 2 brick dwellings on Twenty-third street to cost \$10,000; Mrs. V. Taylor, a \$5,500 brick dwelling at 708 Q street; Peter Fersinger, 2 brick dwellings on New York avenue, N. W., to cost \$7,000; James S. Boss, 5 brick houses to cost \$3,500, and A. B. Walker, a \$3,500 brick dwelling at 1635 Q street, N. W.

Washington, D. C.—Buildings.—Proposals for erecting 9 buildings on Georgetown Heights for the new Naval Observatory will be received until June 12 by William C. Whitney, Secretary Navy.

MISSISSIPPI.

Durant—Wood-working Factory and Foundry.—A. J. Love has added machinery to his wood-working factory, and contemplates building an iron foundry during the summer.

Holly Springs—Cotton Mill.—The Mississippi Land Co. are building a cotton mill.

Macon—Street Railroad.—J. L. Griggs and others have formed a company with a view to building a street railroad about 1½ miles long. If built dummy engines will probably be used.

Natchez—Railroad.—John H. Rice, president New Orleans, Natchez and Fort Scott Railroad, states that he has contracted with Chicago capitalists for building the road.

NORTH CAROLINA.

Addie—Flour Mill.—R. P. Potts, lately mentioned as to erect machinery for a flour mill, will put new machinery in his present mill.

Asheville—Steam Laundry.—A steam laundry is to be started.

Asheville—Street Railroad.—The street railroad reported last week as to be built by the company formed by Natt Atkinson will cost about \$30,000.

Asheville—Saw Mill.—It is reported that J. M. Pickens has lately started a saw mill.

Asheville—Candy Factory.—A \$15,000 stock company has been organized to manufacture candies with R. P. Walker as president.

Charlotte—Cotton Mills.—The Ada Manufacturing Co., previously reported, have let the contract for engine, boilers, pumps and steam fittings to the D. A. Tompkins Co., of Charlotte.

Concord—Bank.—The Concord National Bank will erect a bank building, one story, 22x60 feet.

Danbury—Iron Mines.—It is reported that Pepper & Co. have sold their iron ore mines in Stokes county to New York parties for \$50,000. Mining will be commenced at once, it is also stated.

Durham—Gas Works.—A party offers to build gas works to cost not less than \$25,000 if a certain amount of stock is taken by Durham parties.

Goldsboro—Ice Factory.—R. M. Freeman, H. Deil & Bros., Charles Dewey and Goldsboro Oil Mills have formed the company to build the 11-ton ice factory reported last week. They have ordered machinery and are sinking an artesian well. This is the same as the factory previously mentioned as to be built by the Goldsboro Oil Mills.

Goldsboro—Gas Works.—A party has made a proposition to build gas works. The mayor can give information if anything is done.

Goldsboro—Implement Works.—The agricultural implement works lately reported as to be started will be known as the Wayne Agricultural Works.

High Point—Railroad.—A company will be organized to build a railroad from High Point to Asheboro.

Hoffman—Saw Mill.—The saw mill of W. J. Whitaker, reported in this issue as burned, will be rebuilt at once.

Jackson—Railroad.—It is reported that the Gumberry & Jackson Railroad & Lumber Co. will complete their road to Jackson, 2 miles.

Leaksville—Gold Mine.—J. M. Price will develop a gold mine.

New Berne—Furniture Factory.—A. W. Cook and J. H. Avers will start the manufacture of furniture.

Pantego—Canning and Handle Factories.—The canning and handle factories reported last week as talked of will probably not be started.

Salem—Woolen Mill.—Additional machinery has lately been added to the woolen mill of F. & H. Fries.

Salem—Cotton Mill.—F. & H. Fries have recently added 720 spindles, 13 cards and 15 plaid looms to their Arista Cotton Mills.

Salisbury—Brick Works.—The Salisbury Brick Co. will shortly add machinery for manufacturing pressed brick and drain tiles.

Tarboro—Cotton Factory.—S. S. Nash, O. C. Farrar and others have subscribed \$50,000 towards building the cotton factory reported last week. The cost will be about \$100,000. They will secure the remainder of the capital from the North.

Tarboro—Knitting Factory.—John T. Shackelford contemplates starting a knitting factory in the summer.

Tarboro—Water Works.—There are prospects of water works being built. If anything is done O. Williams can probably give information.

Wadesboro—Hotel.—There is talk of forming a stock company to build a hotel. If anything is done D. L. Parker can give information.

Wakefield—Railroad.—It is stated that the Wilmington & Weldon Railroad Co. (office, Wilmington) will extend their Nashville Branch to Wakefield.

Walnut Cove—Saw Mill.—A saw mill has been started by J. P. Charles and Joseph Tucker.

Webster—Nickel Mine.—Major Willis, of Charleston, S. C., has purchased a nickel mine for about \$5,500 and will develop.

Wilkesboro—Saw Mill.—J. G. Hackett has purchased machinery to start a saw mill.

Wilmington—Saw and Planing Mill.—An addition has been built to the saw and planing mill of Fore & Foster.

Wilmington—Iron Bridge.—The Wilmington, Columbia & Augusta Railroad Co. have let the contract for building a new iron bridge over the Great Pee Dee river in South Carolina to the Passaic Rolling Mills, of Passaic, N. J.

Wilmington—Street Railroad.—The Wilmington Street Railway Co., previously reported, have organized with J. D. Bellamy, Jr., as president, and will at once commence work on their road.

Winston—Armory.—The Forsyth Rifles will soon commence work on an armory to cost \$10,000.

SOUTH CAROLINA.

Baldock—Timber Lands.—Lambert & Usry are developing timber lands. They have lately moved their saw mill to Baldock from Appleton.

Brewer Mine.—Gold Mine and Stamp Mill.—The Brewer gold mine is to be developed on a large scale and an 80-stamp mill will be built during the summer. E. Motz is general manager.

Camden—Knitting Factory.—It is stated that efforts will be made to start a knitting factory.

Camden—Oil Mill.—It is rumored that a cotton-seed oil mill will be started at the new town, Westville, in Kershaw county.

Charleston—Creosoting Works.—The Acme Creosoting Co. has been organized to establish creosoting works, with Henry N. Welch as president, and C. P. Stevenson, secretary and treasurer. The capital stock is \$65,000.

Charleston—Publishing.—The Daily Sun Publishing Co., capital stock \$12,000, has been chartered by John McElwee, John Card and others.

Charleston—Box Factory.—J. C. Schlegel & Son have erected a box factory at 504 King street.

Clinton—Cotton Factory.—The building of a cotton factory is being agitated.

Columbus—Reservoir.—The contract to build the reservoir, previously reported, has been let to James F. Troy at \$6,949.50.

Darlington—Saw Mill and Gin.—A saw mill and cotton gin will be built at the Agricultural Station grounds.

Fingerville—Cotton Factory.—Henry Liles, of New Prospect, and others will build a cotton factory. It is said that about \$50,000 have been subscribed.

Florence—Bottling Works.—Cramer & Kerstner, of Charleston, have established bottling works.

Greenville—Electric Light Plant.—The city council have let the contract for furnishing the electric light plant previously reported to the Brush Electric Light Co., represented by W. A. Wright.

Greenville—Oil Mills.—The work of doubling the capacity of the Greenville Oil Mills, previously reported, will probably soon be commenced. It is contemplated to put in electric light machinery also.

Georgetown County—Matting Factory.—The company previously mentioned as formed by J. Bray, 937 H street, Washington, D. C., and others, to manufacture matting from rushes, will, it is stated, start a factory in Georgetown county. More than 3,000 acres of land have been bought.

Walhalla—Pottery Works.—Wilson & Co., lately mentioned as starting pottery works, have a capital of \$15,000, which they expect to increase soon.

TENNESSEE.

Ashland City—Powder Works.—The Scymore Powder Co., of Nashville, will at once rebuild their works, reported in this issue as partly destroyed by fire.

Athens—Fence Factory.—A fence factory has been started.

Athens—Tinware Factory.—H. Schuman will enlarge his facilities for manufacturing tinware.

Bristol—Railroad.—The Bristol & Danville Railroad Co., previously reported as chartered to build a road from Bristol to Danville, Va., has been organized with John M. Bailey as president; W. D. Jones, vice-president, and G. A. Backmore, secretary and treasurer.

Bristol—Planing Mill.—Buffam & Co. will probably rebuild their planing mill, lately mentioned as burned.

Bristol—Hotel.—J. G. Woods has the plans prepared for his hotel, previously reported, and will receive bids for its construction.

Brownsville—Flour Mill.—The flour mill of Crandall, Durham & Co. is being refitted with new machinery.

Brownsville—Ice Factory.—An ice factory is reported to be built by a party from Clarksville.

Brownsville—Handle, Spoke and Hub Factory.—R. F. Johnson & Bro. have, it is stated, lately started a handle, spoke and hub factory.

Brownsville—Gas Works.—R. A. Dittman, of Troy, O., is overhauling and improving the Brownsville Gas Works, lately purchased by him.

Charleston—Saw and Planing Mill.—A saw and planing mill will be built. D. A. Campbell can give particulars.

Charleston—Flour Mill.—A flour mill is reported to be built. D. A. Campbell can give particulars if correct.

Chattanooga—Houses.—C. D. Mitchell will build, it is said, 4 houses to cost probably \$25,000.

Chattanooga.—John P. Richardson, C. A. Lyerly and others have incorporated the East End Building Association.

Clarksville—Planing Mill.—R. Ledbetter contemplates adding some machinery to his planing mill.

Coopertown—Saw Mill.—Browning & Smith are repairing a burned saw mill, and will put it in operation.

Crossville—Saw Mill.—William Flynn will build a saw mill, and wants machinery.

Dickson—Flour and Saw Mill.—Williams Askins and Robert Easley have purchased the Larkins Flour & Saw Mill, and will overhaul it and put it in operation.

Dyersburg—Oil Mill and Electric Lights.—The Dyersburg Oil & Fertilizer Co. contemplate enlarging their plant and putting in electric light machinery.

Elizabethton—Saw Mill.—A saw mill has lately been erected by William Shell, Jr.

Johnson City—Stove Foundry.—Miller Bros. contemplate starting a stove foundry.

Johnson City—Electric Light Plant.—The Johnson City Electric Light Co., previously reported, have organized with J. J. Weiler as president; W. J. Thomas, vice-president; Frank Evans, secretary, and M. I. Gump, treasurer. They have ordered machinery for a 35-arc light plant. The Thompson-Houston system will be used.

Johnson City—Bank.—The Bank of Johnson City will shortly commence work on a three-story brick building, and wants to purchase a steam heating outfit and terra cotta.

Knoxville—Cracker Factory.—It is reported that C. J. Sweet and J. E. Souett, of Providence, R. I., and others will start a cracker factory.

Knoxville—Fire-alarm System.—The Gayner Electric Co., of Louisville, Ky., have contracted to put in the fire-alarm system previously reported.

Knoxville—City Hall.—The Board of Public Works have accepted the plans for the city hall previously mentioned. It is to be three-stories, 80x45 feet.

Knoxville—Cracker Factory.—E. J. Davis and D. D. Nicholas, of Knoxville, and J. C. Kincaid, M. H. Stephens and B. Tripp, Jr., of Ohio, have chartered the Knoxville Cracker Co., to manufacture crackers, cakes, &c. They will put in machinery at once.

Knoxville—Shoe Factory.—It is reported that J. T. Morris, of Danville, Va., will start a shoe factory.

Manchester—Barrel Factory.—A barrel factory is reported to be built at once.

McMinnville—Jeans Clothing Factory.—Balie P. Cantrell will start the manufacture of jeans clothing on an extensive scale.

Memphis—Compress and Warehouse.—The Merchants' Compress and Warehouse Co. have decided to erect a new cotton compress and warehouse.

Memphis—Houses.—The Idlewild Land Co., previously reported, are making arrangements to build 50 houses.

Monteagle—Electric Light Plant.—An electric light plant is to be erected at the Monteagle Hotel. Machinery is being purchased.

Murfreesboro—Water Works.—It is reported that the Murfreesboro Gas Light Co. and C. Collins have received the contract to build the water works previously reported.

Murfreesboro—Ginnery.—T. B. Wilson is building a new ginnery.

Nashville—Cottages.—E. C. Scruggs has commenced work on 24 cottages.

Nashville—Electric Light Plant.—The Nashville-Jenny Electric Light & Power Co., previously reported, has been organized with A. L. Landis as president, and A. L. Landis, Jr., secretary and treasurer. They have been granted right of way, and will soon want bids on machinery.

Nashville—Dryhouse and Dwellings.—The Edgefield & Nashville Manufacturing Co. will erect a steam dryhouse to cost \$2,000, and Newton McClure, 3 frame dwellings to cost \$6,000.

Nashville—Electric Light Plant.—Machinery has been ordered for an electric light plant to be erected at Glendale Park. J. E. Caldwell can give information.

Nashville—Street Railroad.—The Main Street & Gallatin Pike Railroad will probably be extended.

Toulon—Creamery.—A creamery is being erected by J. T. Fargason, of Memphis.

Toulon—Mill.—Anderson & Co. have erected a mill.

Wartrace—Creamery.—A creamery is reported to be started.

TEXAS.

Anna—Mill.—The Anna Mill Co. will put a new automatic engine about 40 or 50 horse-power in their mill.

Austin.—The Austin Steamboat Co., capital stock \$2,500, has been chartered by John Orr and others.

Black Jack—Roller Mill.—The Farmers' Alliance are thinking of building the flour mill lately mentioned.

Belton—Building.—The Farmers' Alliance will erect a building to be used as an exchange.

Bryan—Hall.—Work has been commenced on a city hall to cost \$7,200.

Clear Creek—Canning Factory.—The Clear Creek Canning Co. are rebuilding their canning factory lately burned.

Corpus Christi—Railroad and Hotel.—A belt railroad and a large hotel are reported to be built. The mayor can probably give information if correct.

Dallas—Railroad.—George F. Alfred, president Dallas, Archer & Pacific Railroad Co., has contracted with the St. Louis-Texas Investment Co. for the building of 140 miles of railroad.

Dallas.—The Blake Mutual Building & Loan Association, capital stock \$500,000, has been chartered by R. H. Montgomery, S. D. Blake and others.

Dallas—Residence.—Mr. Summerfield will build a \$11,000 residence, and has let the contract.

Dallas—Oil Mill.—A company has been formed to start a small cotton-seed oil mill with E. B. Warren as president; Harry Tracey, vice-president; H. C. Staffel, secretary, and C. E. Brown, treasurer.

Fort Worth.—The Fort Worth Electrical Construction Co., capital stock \$25,000, has been chartered by E. E. Chase, A. B. Smith, C. A. Murrah, W. D. Littlefield and E. W. Taylor.

Fort Worth—Buildings.—Hyde Jennings has let contract for a three-story building to cost \$8,000.

Fort Worth—Hotel.—W. W. Dunn will build an addition to his hotel to cost \$16,000.

Galveston—Canning Factory.—The Gulf City Co-operative Manufacturing Association has been chartered to start a factory for canning fruits, vegetables, fish, etc. The capital stock will not exceed \$50,000.

Galveston—Elevator.—The Star Flouring Mills have increased their capital stock from \$100,000 to \$500,000, and will build a grain elevator.

Georgetown—Jail.—The contract to build the jail previously reported has been let to Lorell & Miller, of Brownwood, at \$20,966.

Greenville—Iron Bridges.—The contract for building three wire cable bridges in Hunt county has been let by the county commissioners to the Mitchell Bridge Co.

Jefferson—Iron Ore Lands.—It is reported that Eastern parties have secured options in 5,000 acres of iron ore lands, and will sink shafts to test the deposits.

Lagrange.—The Fayette County Live Stock & Fair Association, capital stock \$20,000, has been chartered by John T. Rankin and others.

Lagrange—Water Works.—Water works are projected.

Leonard—Street Railroad.—A street railroad is talked of. W. T. Gray can give particulars if anything is done.

Llano—Coal Lands.—W. M. Robinson is prospecting for coal near Llano.

Mansfield—Flour Mill.—The capital stock of the Mansfield Milling Co. has been increased from \$5,000 to \$20,000.

Marshall.—The Colored State Fair Co., capital stock \$50,000, has been organized.

McKinney—Cotton Compress.—A company has been formed to erect a cotton compress, and work will be commenced. The capital stock will be about \$60,000.

McKinney—School.—\$25,000 of bonds will be issued to erect a school building at once. The mayor can give particulars.

Rockwall—Bank.—W. B. Womack will erect a bank building.

Seymour—Flour Mill.—The contract for building the flour mill previously mentioned has been let.

Sherman—Iron Works.—J. W. Dickson has purchased the Sherman Iron Works, and will probably greatly enlarge them.

Sulphur Springs—Coal Mines.—S. R. Tipton has secured the right to mine coal on 3,000 acres of land, and will probably soon begin developing.

Terrell—Cotton Compress.—A company has been formed to erect the Morse cotton compress, previously mentioned, and the machinery has been ordered. James Orr or J. G. Timmins can give particulars.

Tyler—Oil Land.—H. H. Rowland expects to sink an oil well during the summer.

Wichita Falls—Flour Mill.—J. D. Helms, of Duffau, will move his roller flour mill to Wichita Falls.

VIRGINIA.

Alexandria.—The Union Building Preservation Co., capital stock \$150,000, has been organized with William Dickson as president; J. M. Wheatly, vice-president, and M. G. McCormick, secretary.

Big Stone Gap—Saw and Planing Mill.—G. E. Dutton, of Warren, is moving his saw and planing mill to Big Stone Gap, previously reported. He will, it is stated, add a sash and door factory.

Brugh's Mills—Canning Factory.—R. Brugh will start a canning factory.

Central City—Stone Quarry.—A limestone quarry has been opened on the land of George F. Cassel.

Charlottesville—Soapstone Quarry.—S. W. Cox is negotiating for the development of his soapstone quarry.

Chatham—Water Works.—The contract for building the water works, previously reported, has been awarded to William H. Ford, of Lynchburg.

Danville—Cotton Mill.—The Riverside Cotton Mills contemplate building an additional mill to double their present capacity of 30,000 yards of cloth daily.

Green Forest—Wood Pulp Mill.—Clemmitt & Sadler will build the wood pulp mill lately mentioned as to be erected by B. C. Moomaw.

Hampton—Street Railroad.—The Hampton & Old Point Railway Co., previously reported, will commence building their railroad as soon as the right of way is secured.

Lexington—Iron Mines.—James P. Ford has opened an iron ore mine near Lexington.

Lynchburg.—A stock company is being formed to develop the mineral spring on the property of William Perkins.

Lynchburg—Canning Factory.—The canning factory reported last week as to be started by a company formed with George W. Moore as president, is the same as the factory previously mentioned as to be started by the Lynchburg Manufacturing Co.

Luray—Iron Mines.—B. C. Bust will develop iron mines.

Manassas—Bone, Plaster and Grist Mill.—Jeremiah Stoeber will erect a bone, plaster and grist mill.

Martinsville—Iron Ore Lands.—J. F. Morehead, of Leaksville, N. C., has purchased iron ore lands for \$3,000.

Middletown—Syrup Factory.—Isaac Cresman contemplates erecting a cane syrup factory by next fall.

Norfolk—Residence.—Charles Wrenn and William Wrenn will each build a residence on York street to cost about \$13,000.

Norfolk—Church.—The Cumberland Street M. E. Church will improve their church at a cost of \$5,000.

Norfolk—Church.—The Grunby Street M. E. Church have purchased a site to erect a new edifice.

Pigeon Run—Lumber Mill.—Robert Massie and others speak of building the lumber mill reported last week.

Portsmouth—Machinery.—The Niles Tool Works, of Hamilton, O., have contracted to furnish tools for the U. S. navy-yard to cost \$20,800, and William Sellers & Co., of Philadelphia, Pa., tools to cost \$11,391.

Richmond—Gas and Water Works, &c.—The Powhatan Construction Co. has been formed to organize companies to build gas and water works, &c. The capital stock is to be not less than \$100,000, nor more than \$500,000. J. Thompson Brown is president, and W. S. Dashiell, secretary and treasurer.

Richmond—Brick Works.—W. J. Westwood has lately added some machinery to his brick works.

Roanoke—Stone Quarry.—I. H. Bachrach has leased and will develop a greenstone quarry 5 miles from Roanoke.

Roanoke—Hotel.—Charles Keffer, of Buchanan, will prepare plans for the hotel previously mentioned as to be built by Henry Felix, of Buchanan, at a cost of \$30,000.

Roanoke—Electric Light Plant.—W. N. Ruffin has made a proposition to erect an electric light plant.

Salem—Wine Factory.—J. Bayliss, of Roanoke, will start the manufacture of wine.

Staunton—Canning Factory.—The Staunton Cannery Co. has been organized to start a canning factory. I. Witz is president, and H. Hutcheson, secretary.

Staunton—Electrical Street Railroad.—The (Staunton) Thompson-Houston Electric Light Co. contemplate, it is said, building a street railroad.

Staunton—Church.—The church reported last week as to be built by the Lutherans will cost about \$25,000. J. H. Howe, pastor, can give particulars.

Suffolk—Box, Hub and Spoke Factory.—W. H. Gay contemplates erecting a box, hub and spoke factory, and wants to purchase machinery, belting, oils, &c.

Suffolk—Street Railroad.—The Montrose Land & Improvement Co. contemplate building a street railroad.

Warrenton—Brick-yard.—Jolly Bros. contemplate starting a brick yard.

WEST VIRGINIA.

Charleston—Building.—J. D. Barnes will erect a large three-story brick building at Virginia and Hale streets.

Charleston—Church.—Proposals for building the church for the Presbyterians, previously mentioned, will be received until April 28 by C. C. Lewis.

Charleston—Church.—The Baptists contemplate building a new church.

Charleston—Opera House.—There are prospects of an opera house being built.

Charleston—Residence.—W. T. Thayer will build a residence to cost \$10,000.

Charleston—Scale Factory.—A company will probably be formed to start a scale factory. G. W. Craig can give information.

Clarksburg—Water Works.—Proposals for building the water works, previously reported, will be received until May 15 by the water works commissioners. John W. Hill, Cincinnati, Ohio, is consulting engineer.

Elizabeth—Bang Factory, &c.—J. C. Hale and Maurice S. Hal, of Elizabeth; D. E. Salaker and Randolph Stalaker, of Wheeling, and L. A. Cole, of Parkersburg,

have chartered the West Virginia Bang Co. to manufacture bungs, lumber, etc. The authorized capital stock is \$100,000.

Elkins—Coal Mine.—The Spring Garden Coal Co. are opening a new mine.

Martinsburg—Electric Light Plant.—L. N. Cox, representing the Schuyler Electric Light Co., of Middletown, Conn., has contracted to erect a plant. The capacity will be about 45 arc and 1,000 incandescent lights.

Morgantown—Railroad.—It is reported that the Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) will complete their "State Line" branch from Uniontown, Pa. to Morgantown during the summer.

Parkersburg—Canning Factory.—John W. Dudley, Lysander Dudley and others are thinking of starting a large canning factory.

Piedmont—Railroad.—The West Virginia Central & Pittsburg Railway Co. have made surveys for a branch road to extend up Abrams creek to the Elk Garden coal property.

Wheeling—Hinge Factory.—The Wheeling Hinge Co., reported last week as to rebuild their burned hinge factory, will build the new factory on a somewhat larger scale.

Wheeling—Reservoir.—Proposals for building the reservoir, previously reported, will be received until May 10 by the City Water Board, H. P. Wilkinson, secretary. It is to be 50x665 feet by 11½ feet deep.

BURNED.

Ashland City, Tenn.—The works of the Sycamore Powder Co., of Nashville, partly destroyed by fire; loss \$10,000. Will be rebuilt at once.

Augusta, Ga.—The pattern shop of C. F. Lombard.

Baltimore, Md.—The decoy factory of Martin J. Klunk on Patterson avenue; loss \$1,000.

Baltimore, Md.—The bottling works of H. M. Kohler at 430 North Front street.

Camden, Ark.—The lumber mill of C. R. Barham.

Cochran, Ga.—The mill of George W. Jordan, Jr.

Columbiana, Ala.—The saw mill of J. W. Bolling.

Evansville, Tenn.—The saw and grist mill of James Evans wrecked by a boiler explosion.

Hoffman, N. C.—The saw mill of W. J. Whitaker. Will be rebuilt at once.

Houma, La.—The Houma Moss Factory.

Mammoth Spring, Ark.—The hotel owned by the Mammoth Spring Water Power & Improvement Co.; loss \$5,000.

Memphis, Ala.—The gin of Winters Jones.

Newton, N. C.—The saw mill of G. M. Raynor damaged by a boiler explosion.

Rustburg, Va.—The stove factory of W. H. Ford, 5 miles from Rustburg.

Shreveport, La.—The cooperage shop of George Maas.

Towaliga, Ga.—The gin of Kinard & Sons; loss \$1,500.

Ty Ty, Ga.—The saw mill of Mr. Creigers; loss \$5,000.

To Build Cotton Factory.

TARBORO, N. C., April 20, 1888.

Editor Manufacturers' Record:

It is our purpose to build a cotton factory to cost about \$100,000, half of which we raised here in a few hours, and the other half we propose to import from the North by offering inducements substantial enough to overcome all obstacles as soon as we discern the right man or men. Eligible sites have been offered free and immunity from taxes and every other encouragement. J. F. Shackelford will start a knitting factory. S. S. NAM.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Bagging Machinery.—The Troy Fertilizer Co., Troy, Ala., want to purchase machinery to manufacture bagging. Want second-hand machinery in good condition.

Boilers, Engines, Spoke Lathes and Band Saws.—J. Studebilt, Choctaw Corner, Ala., wants price-lists and catalogues of boilers, engines, spoke lathes and band saws.

Box, Hub and Spoke Machinery.—W. H. Gay, Suffolk, Va., wants to purchase planing machine, band saw, lathes, circular saw, shafting, oils, &c., &c., for a box, hub and spoke factory.

Brick Machine.—William Plummer, Edgewood, Ga., wants information as to where a "Lone Star" brick machine can be purchased.

Canning Machinery.—M. Travers, Myers, Fla., wants to purchase machinery for canning and bottling fruit.

Cask Machinery.—George A. Wagener, Charleston, S. C., wants the address of parties who can furnish machinery for making casks for packing clay.

Drill.—H. H. Rowland, Tyler, Texas, will purchase a drill to sink an oil well.

Electric Light Machinery.—The Nashville-Jenny Electric Light & Power Co., Nashville, Tenn., will shortly want bids for machinery for their plant. A. L. Landis, Jr., is secretary and treasurer.

File Holders.—Proposals for furnishing 10,000 file holders will be received until May 12 by C. H. Hoyt, assistant quartermaster, Washington, D. C.

Flour Mill Machinery.—D. A. Brooks, Jr. & Co., Sturgis, Kentucky, want machinery for a flour mill of about 60 or 70 barrels capacity.

Gold Mining Machinery.—J. S. Turner, Ashland, Ala., wants prices and terms of machinery for developing a gold mine.

Grinding Machinery.—Jeremiah Stoeber, Manassas, Va., wants information as to best machinery for grinding bone.

Iron Bridge.—Bids for building an iron bridge over New river at Fayette Station, W. Va., will be received until May 12. E. B. Hawkins, Fayetteville, W. Va., can give particulars.

Iron Roofing.—E. T. McConnell, Clarksville, Ark., wants prices on large quantities of iron roofing f. o. b. cars at Clarksville.

Machinery for reduction works is not wanted by Mr. Croselmeire, of Thomasville, N. C., as stated last week.

Reservoir.—Proposals for building a reservoir at Wheeling, W. Va., will be received until May 10 by the City Water Board. H. P. Wilkinson, secretary. It is to be 50x665 feet by 11½ feet deep.

Sash, door and blind machinery will be purchased by D. Rhodes, Hawkinsville, Ga.

Saw Mill Machinery.—William Flynn, Crossville, Tenn., wants prices on 15 horse-power boiler and engine, and 52-inch saw.

Soap Presses.—J. W. Popham, Orlando, Fla., wants to purchase two good soap presses.

Steam Heating Outfit and Terra Cotta.—The Bank of Johnson City, Johnson City, Tenn., will erect a three-story brick building, and want to purchase a steam heating outfit and terra cotta.

Tram Engine.—George R. Lombard & Co., Augusta, Ga., wants to purchase a light tram engine for hauling logs.

Water Works.—Proposals for building water works at Clarksburg, W. Va., will be received until May 15 by the water works commissioners, R. T. Lowndes and others. 617 tons of pipe will be required, and the pumping machinery is to have a daily capacity of 500,000 gallons.

Ice Factory and Electric Light Plant to be Erected.

TUSKALOOSA, ALA., April 19, 1888.

Editor Manufacturers' Record:

The Tuskaloosa Ice Manufacturing Co. has been organized and a contract closed to Dr. E. C. Lyles, of New Orleans, for the erection of a plant to be in operation within sixty days. The Tuskaloosa Electric Light & Gas Co. has been organized and contract closed by the city with W. C. Harris, Jr., for the erection of an electric lighting station. Work on the plant will begin at once.

TUSKALOOSA COAL, IRON & LAND CO.
W. C. JEMISON, Pres.

BRUNSWICK, GA., April 24, 1888.

Editor Manufacturers' Record:

A survey of the city is being made now with the view to putting in a sewerage system. Our surveyors will complete their work in about two months.

D. T. DUNN.

Planing Mill.

PINEVILLE, KY., April 17, 1888.

Editor Manufacturers' Record:

We will build a planing mill to be completed by May 1st, and it will be equipped with all the latest improved wood-working machinery. J. Q. & J. E. MURSON.

To Start Furniture Factory.

TUPELO, MISS., April 4, 1888.

Editor Manufacturers' Record:

We have organized, and will put in operation soon a furniture factory at this place. W. C. Baskin is president, and H. E. High, secretary and treasurer.

H. E. HIGH.

To Start Canning Factory.

DENTON, MD., April 18, 1888.

Editor Manufacturers' Record:

Mr. George T. Redden and G. A. Deakyn will erect a cannery at this place and have it in operation for this season's pack.

G. T. REDDEN & CO.

Shingle Mill and Brick-yard to be Started.

BRIDGEPORT, FLA., April 18, 1888.

Editor Manufacturers' Record:

A shingle mill will be started at once by Mitchell Renz, and a brick-yard will also be started by same party as soon as machinery can be secured and a practical man to run it.

P.

BLUE SPRINGS, FLA., April 15, 1888.

Editor Manufacturers' Record:

Negotiations are pending for the erection of a hotel of sufficient dimensions to accommodate all comers at Blue Springs, Fla.

F. H. BROWN.

TUPELO, MISS., April 16, 1888.

Editor Manufacturers' Record:

The Helena, Tupelo & Decatur Railroad was chartered by the legislature of Mississippi in January last. We hope to begin the survey at an early day and secure the right of way, so as to be ready by July or August to begin construction. Books for subscription have been opened, and we think the project a success.

J. L. FINDLEY.

Stove Works for Anniston.

ANNISTON, ALA., April 24, 1888.

Editor Manufacturers' Record:

A company has been formed to manufacture stoves, with a capital of \$50,000. Samuel Noble is president.

E.

Will Add Cotton-seed Oil Mill

TROY, ALA., April 17, 1888.

Editor Manufacturers' Record:

At a stockholders' meeting yesterday our company authorized its directors to put up an oil mill, acid chamber and ginery. It also authorized them, if after further investigation they thought best, to put in machinery for manufacturing bagging.

TROY FERTILIZER CO.

Building Ice Factory.

GOLDSBORO, N. C., April 19, 1888.

Editor Manufacturers' Record:

The construction of an ice factory is now under headway; to be supplied with water from a bored well, the depth of which is now more than 100 feet, and is still going downward after a more copious supply of water. The factory is being built by a joint stock company of home capital, consisting of H. Deil & Bros., R. M. Freeman, Chas. Dewey and Goldsboro Oil Mills.

J. E. ROBINSON.

BESSEMER, ALA., April 15, 1888.

Editor Manufacturers' Record:

We are increasing our boiler capacity double to increase our dry kiln capacity.

BESSEMER MANUFACTURING CO.

Will Manufacture Jeans Clothing.

McMINNVILLE, TENN., April 17, 1888.

Editor Manufacturers' Record:

I will start to manufacturing jeans clothing on a large scale May 1st.

BALIE P. CANTRELL.

Will Refit Flour Mill.

ADDIE, N. C., April 17, 1888.

Editor Manufacturers' Record:

I am intending to put new machinery in my mill.

R. P. POTTS.

Rebuilding Iron Works.

CORSICANA, TEXAS, April 17, 1888.

Editor Manufacturers' Record:

I was burnt out on the 9th inst., and have commenced rebuilding my iron works. Hope ere long to be ready for work.

G. W. CHALLAR.

To Erect Electric Light Plant.

GREENVILLE, S. C., April 21, 1888.

Editor Manufacturers' Record:

I have contracted with town council of Greenville to erect a 60-arc light plant and 450 incandescent light plant, Brush system. Contemplate to be running the arc lights in 60 days.

W. A. WRIGHT.

Pottery Works.

WALHALLA, S. C., April 16, 1888.

Editor Manufacturers' Record:

We have just started our pottery works. Buildings are well under way, and we expect to commence operations in a month's time with all the latest improved machinery for making the above goods. Our capital is \$5,000, and we expect to increase it shortly.

WILSON & CO.

WARRENTON, VA., April 22, 1888.

Editor Manufacturers' Record:

I have ordered a brick machine, and as soon as it comes I will open a brick-yard.

E. M. JOLLEY.

Bids Wanted for Building Iron Bridge.

FAYETTEVILLE, W. VA., April 17, 1888.

Editor Manufacturers' Record:

The bridge over New river at Fayette Station will be rebuilt. Bids received until the 13th day of May, 1888, at which time all bids will be considered and contract awarded.

E. B. HAWKINS.

80-Stamp Mill to be Built.

BREWER MINE, S. C., April 16, 1888.

Editor Manufacturers' Record:

We are opening out mine by railroad tunnel. Shall build 80 stamp mill this summer. Machinery all new, of best make. Company consists of a syndicate of some of the most successful miners in America. We have over 3,000,000 tons of ore developed.

E. MOTZ, Gen'l Manager.

Building Flour Mill.

CLIFTON, TEXAS, April 16, 1888.

Editor Manufacturers' Record:

We are building a 75 barrel roller mill at this place. Will have it completed by the 15th of next August. It will cost about \$12,000. Ours is an incorporated company with W. S. Helm as president; J. G. Williams, secretary, and G. B. Helm, treasurer.

W. S. HELM.

Erecting Cotton Compress.

HILLSBORO, TEXAS, April 14, 1888.

Editor Manufacturers' Record:

We are putting in the compress at Plano, Texas, to be ready by August 15th. This young city needs a good roller mill. It is situated in the heart of an excellent grain country, and roller mills would pay well; has two railroads.

FILES, TAYLOR & FILES.

To Erect Electric Light Plant.

NASHVILLE, TENN., April 21, 1888.

Editor Manufacturers' Record:

The Nashville Jenny Electric Light & Power Co. has been fully organized with A. L. Landis, Sr., as president, and A. L. Landis, Jr., secretary and treasurer. The right of way has been granted through the streets of Nashville, and the company will be prepared to receive bids for machinery, &c., within 60 days.

A. L. LANDIS, JR.

Saw Mill.

HAMPTON, FLA., April 19, 1888.

Editor Manufacturers' Record:

Messrs. Farmer & Keiruff are putting up a 30 horse-power saw mill at this place.

M. N. BLANTON.

Iron Foundry.

CAMDEN, ARK., April 18, 1888.

Editor Manufacturers' Record:

An iron foundry is being erected by Edwin Clifton, and the Camden Building & Loan Association; capital stock not to exceed \$500,000; has been chartered with W. F. Avera, president, and J. B. Friedheim attorney.

J. B. FRIEDHEIM.

Remodeling Flour Mill.

WAXAHACHIE, TEXAS, April 17, 1888.

Editor Manufacturers' Record:

Our flour mill is being remodeled to the roller system. The rolls, which are of the Todd Stanley pattern, are now on the premises; also a complete new outfit of reels, purifiers, dust collectors, &c., the old power only being retained, the Huffman Improvement Co., Fort Worth, being the owners. Will be ready for operation in a month from now.

J. HART.

Anniston's New Enterprises.

[Special correspondence MANUFACTURERS' RECORD.]

ANNISTON, ALA., April 23, 1888.

The past week witnessed the laying of the last rail on the Anniston & Cincinnati track into the union passenger depot of this city, and into the furnace and ore yards of the Woodstock Iron Co. Trains will probably soon begin running as far as Duke's Station. Work on the tunnel beyond that point is progressing very satisfactorily. This line when in operation, connecting with the Cincinnati Great Southern system at Atalla, will give to Anniston advantages over the other great Southern systems of railroads which will enable the manufacturers and merchants of this city to ship and receive freight to and from any point in the United States at competitive rates.

I hear of another railroad enterprise, which means much for the Model City if it materializes, and the gentlemen interested in it are men who push to final consummation any project they undertake. The plan is to construct a railroad beginning in Anniston, extending through the Choccolocco Valley to White Plains, Rabbit Town, and thence on to Palestine, or some equally as favorable point on the East & West Railroad this side of Cedartown.

An immense number of workmen are now busily engaged in filling in around the union passenger depot here, and another large force are laying the press brick as rapidly as possible. When completed Anniston will undoubtedly have one of the handsomest and most convenient passenger depots in the South.

That part of the city circumjacent to the depot is rapidly undergoing a perfect transformation. The Barbour Machine Works nearby have finished the erection of their buildings, placed their machinery into position, and are now nearly ready to begin operations. The Anniston Bottling Works, in that neighborhood, have completed buildings and are doing a prosperous business in the present quarters, from which they are to move when the new plant is in order. It is gratifying to observe the growth of these small industries, and every town and city in Alabama would be all the better if they would inaugurate a generous policy favorable to them. Recently commercial travelers hailing from the town of Tallapoosa, Ga., and representing broom and cigar factories, respectively, came to Anniston and sold numerous bills of goods in this city, articles which ought, by all means, to be manufactured here, and if this letter should reach the eyes of two young men with small capital, but with business experience and bustling qualities, who keep awake night cogitating over the best plans for attaining wealth, I would advise them to come to Anniston and plant themselves, one at the head of a cigar factory, and the other in a position to direct the formers of a broom making industry. The local demand for the output of these concerns would be sufficient to keep them busy.

Anniston certainly proposes to keep cool this summer from the preparations she is making to manufacture ice. A new ice manufacturing company has been organized with a capital stock of \$25,000, to erect a 10-ton plant. A lot on Eleventh street, near the cotton factory, has been purchased and work on the buildings will be begun about the first of May and prosecuted with vigor. This company intend having their factory in operation in time to meet the demands of the trade this season. A meeting of the stockholders of the Anniston Ice Manufacturing Co. (the factory now in operation) is called for May 17th for the purpose of increasing their capital stock to \$30,000. It is the intention of the company to increase their capacity to 10 or 12 tons per day. It is probably not out of order to ask what has become of the American Refrigerator & Construction Co., of Harrisburg,

which sent a representative to Anniston several months ago, and who, while here, purchased a site and announced the intention of his company to erect on it a 20 ton ice factory and cold storage plant, having capacity of 20,000 cubic feet?

The crush at the hotels of Anniston has never been so severe as it has been during the past ten days. One hundred arrivals were registered at the Inn and the Tavern alone in a single day, and both houses were compelled to turn people away. Two of these arrivals were so impressed with the positive demands for additional hotel facilities here that they lost no time in securing a central location and placed their instructions in the hands of architects for the plans of a large hotel. The building is to be three stories in height, and will contain forty or fifty rooms, beside store rooms on the ground floor. The projectors, Messrs. Cobb and Moore, agents of the New York Life Insurance Co., propose to spare no expense in making their building a model of architectural beauty and the most imposing business structure in the city. The site, southwest corner of Wilmer and Tenth streets, (one hundred and twenty five feet square) is a central one, and of an elevation which will insure good drainage for the building and will also command a fine view of the city and surrounding mountain. The plans are now being drawn, and when completed work on the building will begin at once, the projectors announcing their intention to have it completed within four months.

The work of laying new pavements has been finished, and since the rocks and rubbish have been taken away the streets present a decidedly city-like appearance.

Many important transfers of real estate took place here during the past week. A valuable lot on the southwest corner of Noble and Eleventh streets was purchased by a gentleman who proposes to build a block of stores as soon as the lease of the present occupant expires.

Mr. C. G. Wilson, of Milledgeville, Ga., is here, endeavoring to organize a stock company to manufacture a cotton press of which he is the inventor. This press, it is claimed by Mr. Wilson, will pack to a density of 25 to 28 pounds per cubic foot, from $2\frac{1}{2}$ to 5 pounds per cubic foot more than the minimum demanded for compressed cotton. The press will make bales two by four feet in size, while the presses now on the market are $2\frac{1}{2}$ by $4\frac{1}{2}$ feet, with a density of about 16 pounds per cubic foot.

Notwithstanding many serious obstacles, work at the gas plant is being vigorously pushed. Pipe-laying began Monday. The contract which the gas company has with the city requires that lights be turned on by the ninth day of July next. These works, when in operation, will be a model plant in every particular, and one of the very finest in the entire South.

The foundry building at the car works of the United States Rolling Stock Co. is approaching completion, when work will begin on the new rolling mill.

Many new contracts for residences have been given out within the past week; some of these are to be architecturally beautiful. The demand for dwellings is unabated, notwithstanding the number now being daily completed. Anniston certainly offers tempting inducements to the capitalists who will come to the Model City and build a row of cottages or a block of apartment houses.

A company has just been formed to establish a stove foundry at Anniston. The capital is \$50,000, and Mr. Samuel Noble, the veteran iron man, is president, thus assuring its success. EDWARD A. OLDHAM.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Progress at Tuskaloosa.

For almost a year we have had standing in the MANUFACTURERS' RECORD a full-page advertisement of that fast growing Alabama mineral city, Tuskaloosa, and the assurances received from the Tuskaloosa Coal, Iron & Land Co., which represents the head and front of the material development in that section, of the great benefit derived from this journal as an advertising medium are highly gratifying.

We have from time to time called the attention of our readers to the advantages of Tuskaloosa as a point for investment or location, and the wonderful progress made by that city during the past year, as well as the flourishing condition of all the business enterprises recently established there proves conclusively that our words of commendation were not ill-advised. Tuskaloosa is one of the growing Southern cities that makes no effort to cultivate a "boom," and its citizens take pride in the great progress made by the city in a strictly legitimate, dignified business way.

New industries have been located at Tuskaloosa; hundreds of new dwellings and business houses have been erected; a new hotel, costing about \$50,000; a new public school building, costing \$20,000; planing mills, bottling works, brick yards, coal and lumber yards, ice factory, water works, electric light plant, what is said to be the most complete cotton gin in the South, a belt railway, a new national bank with a capital of \$100,000, etc., etc., and all this with none of the hue and cry that marks the progress of so many other towns. It is possible that Tuskaloosa is too modest and is carrying its conservatism too far, for certainly it is a town that has an undoubted and tangible backing for the claims it advances.

One of the most surprising circumstances connected with Tuskaloosa is the recent interest awakened in the real estate market. With no advertising or no special effort exerted, the Tuskaloosa Coal, Iron & Land Co. has sold during the past two weeks, at private sale, in the neighborhood of \$100,000 worth of lots. The city is to be congratulated on the fact that these lots for the most part were not purchased by speculators, but by parties whose intention it is to build houses and improve the property thus acquired.

The population of Tuskaloosa has increased so rapidly that the matter of house building has not been able to keep pace, and the situation to-day is such that the numerous dwellings now going up are rented or sold before the foundations are laid. This is gratifying, but it calls for energetic action on the part of those who have the city's interest in hand, for it is population that makes the town, and a wise town will prepare in advance for its rapid increase.

Tuskaloosa is rapidly building its railroad, the "Tuskaloosa Northern," into the coal fields, and as the intention is to ship the coal from Tuskaloosa to the gulf by water, renewed interest is being awakened in regard to the Warrior river, and that city is again congratulating herself upon the fact that she possesses the only water outlet from the Warrior mineral field to tide water. In this connection the following from the Tuskaloosa Times of the 18th inst. is of general interest:

"Mention was made in a recent issue of the Times of Mr. S. P. Wells, of Parkersburg, W. Va., having visited Tuskaloosa for the purpose of investigating the feasibility of shipping coal by barge to Mobile. Mr. Wells investigated the opportunities offered at this end of the line, and then made the trip to Mobile by river, with the intention of posting himself thoroughly upon all points bearing upon the matter. The following extract from a letter written by Mr. Wells to President Jemison, of the land company, is of more than usual interest to our readers and is a strong endorsement of the claims the Times has advanced of the importance

of this river to Tuskaloosa's development. Mr. Wells says, under date of April 6th: After taking leave of you, I embarked upon the steamer Ruth for a run down your beautiful Black Warrior river, and though there was a high stage of water for such an inspection of the stream as I should have preferred, I am convinced of the great usefulness of the river as a transportation line for barges, for the successful handling of coal, iron, coke, cotton, cotton-seed, etc.

I am confident that a tow boat can take at least four barges of coal, aggregating a thousand tons, from Tuskaloosa to Demopolis, from which point eight barges, or two thousand tons, can be taken to Mobile. The run down the river was most interesting to me, and I enjoyed it very much. I learned also that there was a passage from the Gulf into Lake Ponchartrain, and a canal into the city from the lake, and Capt. Stone, of the Ruth says coal laden river barges can be taken from Mobile into the lake and into New Orleans.

We have here the views, after a careful investigation, of a gentleman who for years has made the handling of barges a business. He is thoroughly posted as to the water requirements necessary to the successful and profitable running of freight barges, and his words give practicability to our oft-written assertions that the Warrior river opened up to us possibilities not possessed by any other section in the Warrior coal fields. Mr. Wells is confident that coal-laden barges can be run direct from Tuskaloosa to Mobile and New Orleans, and we have thus practically opened to us the markets of the world. At all events we are assured of a ready market for our outputs of coal and iron, be they many or few, and it needs but the development of our resources to place Tuskaloosa in the front rank of cities in the iron and coal producing center. That this development will come in time is just as certain as that the sun will rise, and when it does come Tuskaloosa, without any boom, will take her place among the important commercial marts of the South. Nature has done for us all she can, and it now remains for man to develop, utilize and invest with a money value the gifts of nature. The coming summer will probably witness the development of some of our resources, and once the pick is at work our water way will be utilized, and Tuskaloosa, Mobile and New Orleans will be united in the closest bonds of commerce."

What an English Iron Trader Says.

At a meeting of the South Staffordshire Institute of Iron & Steel Works Managers, held in Dudley, Eng., some weeks ago, in the course of discussion on American foundry irons Mr. Roberts, Jr., (Swan Village Foundry) said:

"It appeared that the average irons of America were far above the average iron they used in their country for purity. If they considered the disadvantages which the Americans suffered from in many ways, they ought not to lose heart in that district, especially when they bore in mind the great distance the Americans had to fetch their fuel for the furnaces. If the Americans were to adopt free trade, where would they be in competition against England? Could they produce the iron and sell it in the open market at anything like the price of iron selling in England? But for the policy of protection in America, English iron makers could swamp the whole of the American production of iron, and could send them many thousands and probably millions of tons of iron more than was sent, if English iron was not subjected to a duty of 45 to 50 per cent. English iron makers were restricted in their production by the protective duties of other countries, who received the benefit of that protection, while that country suffered from it."

And so but for protection "English iron makers would swamp the whole of the American production of iron." This is what our free trade friend seems very anxious to assist English iron makers in doing. England's efforts have always been directed to prevent the development of American iron industries.

In Union There is Strength.

Oxford's Good Example.

OXFORD, N. C., April 18, 1888.

Editor Manufacturers' Record:

A grand celebration has been held here to-day in honor of the completion of the new railroad between Oxford and Clarksville, Virginia. The opening of this steel highway to the North means much for this place, and for her two rivals, Henderson and Durham, for it puts these three enterprising tobacco towns into new relations to Richmond, one of Virginia's great tobacco marts, and forms one link of a projected system that, when completed, will give to the planters of the Golden Belt, and to business interests of every description advantages they have long needed. It was fitting that such an event should be celebrated with much pomp and circumstance, and it has been done handsomely, as all who have passed the day here will attest.

Oxford has been a township a little more than fifty years, and is the capital of Granville county. As such, until about 1880, it was a petty dead-and-alive country village, devoid of any special attraction, save those which nature has lavished bountifully upon this beautiful rolling region. At stated intervals, when court was held, there was considerable stir for a week, and then life dropped back into its ordinary dullness. When the war occurred the young and middle-aged men were drawn into it, and many never returned. Those who did found it about all they could do to make both ends meet, and there seemed to be nothing better before them than a ceaseless struggle for the necessities of life. But the war had revealed to tens of thousands of Northern soldiers the superiority of bright leaf tobacco, and Durham, whose Blackwell and Duke were manufacturing it for them, could not furnish all the "bright leaf" they required, so gradually the planters of Granville county cultivated the weed and cured it by the new processes that had been found efficacious, then carried it to that market where it brought prices that astounded them. Henderson, thirteen miles eastward, in Vance, another golden belt county, was also getting to be a considerable tobacco market and paid equally high prices. Very soon Granville's farmers were out of debt and had plenty of money. They joined with their Vance county neighbors and built a railroad between Oxford and Henderson, which gave them direct communication over the Seaboard Air Line with the rest of the world. The increase of area devoted to the cultivation of tobacco in the country round about Oxford, and the rapid accumulation of wealth there attracted attention to the city. Farmers pulled down their old houses after moving into new ones, built in modern style. They clothed themselves and their families tastefully, they lived liberally. They had their children educated in the best schools. Merchants flocked there, bought lots and built good stores. Tobacco buyers went there and sales houses were provided. The planters of Granville soon had a home market at their capital, competing with Henderson and Durham for their crops. The enterprising spirit of the town was felt in all parts of the county. The people became proud of their capital, and ready to help forward all reasonable projects it might suggest. "We need direct railroad connections with Richmond," said the townsfolk. "Go ahead and get them, we will do whatever you say," responded the farmers. Clarksville was just north of the Virginia line, and almost due south from Richmond. From the former place a railroad had been completed to Keysville, a station on the Richmond & Danville Railroad. By constructing an extension of that

road to Oxford the desired end could be attained. The people determined to do it, and to-day's celebration is the happy conclusion of their venture. Rather, it is the beginning of the fruition of a long cherished hope. Not only does this road put them within six hours of Richmond, but it saves them freights on car load lots to the tune of \$100 a day.

Never was a more charming April day than this has been—all nature seemed to share the universal joy. The trains from Henderson last night were crowded. Many ladies from Virginia, and from the flourishing towns between Portsmouth and Raleigh came on them; also two military companies, Governor A. M. Scales and staff, and several high rank State officials. Other excursion trains arrived this forenoon, bringing hundreds more. Early people from all parts of this and adjoining counties began to come. All kinds of vehicles were brought into use, from the negro's bull cart up to the finest buggies and charioteers. About eleven o'clock the Henderson detachment arrived in a long procession of carriages, some of them gaily decorated, and all their horse-cloths bore the motto, "Henderson's tribute to Oxford."

Soon afterwards the whistle was heard announcing the approach of the Richmond train. It brought 152 visitors, of whom 120 were delegates, (40 each) from the Chamber of Commerce, the Grain and Cotton Exchange, and the Tobacco Exchange. The remainder represented nearly every prominent industry of that flourishing city.

With them was a fine band and a detachment of artillery with a field howitzer. Carriages were in waiting, in which they were speedily seated, and then, preceded by a military escort, and Governor Scales and his party, and followed by the Henderson delegation, and by a long train of vehicles representing the trades of Oxford, the Richmond visitors were conducted to Asylum Park, a beautiful lawn dotted with stately white oaks, belonging to the property of the Masonic Orphan Asylum, where a scene met their eyes that fully repaid them for their journey. Off to the left were eleven large tables, each forming a hollow square, within which the ladies of Oxford and their attendants were waiting for their guests. On them were most tempting cold lunches, enough to feed to satiety the 7,000 people who were in the park. At some distance to the right was the speaker's stand, surrounded by a waiting throng. Between it and the tables were hundreds of vehicles of every description; most of them filled with people. The "small boy" was everywhere in great numbers, and so were the belles and beaux. The artillery detachment was escorted to the summit, where the horses were withdrawn, the howitzer loaded and a governors' salute was fired. After this addresses of greeting and congratulations were made, the multitude was fed, and the vast assembly dispersed. To-night a merry ball is in progress, with which will end the festivities of a joyous day.

This celebration was designed and carried to its successful completion by the Commonwealth Club, an organization formed in this city last February, of which Mr. Wm. A. Davis is president, and Mr. A. J. Fued, secretary. This club has but one purpose, which is to do everything possible for the prosperity of Oxford, of Granville county and of the "Golden Belt." The business men of Oxford all belong to it, and citizens of all ages and both sexes give it hearty co-operation. "We are but about 3,000 people now," said Mr. S. W. Parker, "but we have gained 125 per cent. since 1880, when we numbered only 1,349. Ninety per cent. of our increase has accrued since 1883, and we expect now that this road is completed to have at least

5,000 inhabitants when the census taker comes in 1890."

When one sees the unanimity of this people and notes their new buildings, both public and private, and recollects what they have accomplished since the town woke up, he will not think this an idle expectation. A little country village that has blossomed into a city with a fine new town hall and market-house, that has determined upon electric lights, that is hunting for a water supply, that has opened up railroad communication with Richmond, that often disposes on a single sales day of \$25,000 worth of tobacco, that has good stores, good schools, an energetic progressive mayor, a bright industrious and harmonious community, and finally such a club as the Commonwealth, is certain to prosper in every way. B. S. P.

The Chapin Pneumatic Process for Making Wrought Iron.

The Chapin Pneumatic Iron Co., of Hyde Park, Ill., have issued an interesting pamphlet entitled "Chapin Pneumatic Process Wrought Iron Dephosphorization." This process, which has been successfully tested at the works of the Bethlehem Iron Co., is a combination of the pneumatic or Bessemer process and the old mode of producing wrought iron by puddling.

As described in the Bulletin of the American Iron and Steel Association, the melted iron is first run into a converter, which is lined with ganister or other suitable acid lining, the same as in the Bessemer process, where it is blown to the point where the silicon in the iron has been so far reduced that the power of its acid product is broken, and at the same time carbon enough is left to preserve, with its high degree of initial heat, the fluidity of the iron. The charge is then removed by the aid of a ladle to the ballers or revolving reverberatory furnaces, which are lined with a refractory oxide of iron or other oxide, and heated by either coal or gas to a welding heat. Under the slow motion of the baller the charge is soon made up into a ball, and is then removed to a squeezer. The acidulous cinder from the converter is to be left in the ladle, and by supplying an abundance of basic material the phosphorus and sulphur are removed in the baller.

The Chapin Company claim that by the use of the same high class pig used in the great steel process, they get an iron particularly pure, and therefore soft and admirably adapted to all the uses to which this class of iron is usually devoted. But the principal claim is that they are able to take pig which, on account of its high phosphorus, is ruled out of use in the Bessemer process, and produce a superior quality of wrought iron at a saving of about \$5 per ton compared with the puddled iron from the same stock. As \$5 50, the price paid for puddling at Pittsburgh, is about the highest price paid in the world, and as it declines in England to 6s. 6d., \$1.57, the claim that \$5 can be saved may be considered the maximum saving possible.

The Bethlehem Iron Company say of it that the economy will depend largely on the adaptability of the plant to the process, but as the process itself is based on well understood principles, there is no reason why it should not be more economical than hand puddling.

Will Rebuild Saw Mill.

HOFFMAN, N. C., April 31, 1888.

Editor Manufacturers' Record:

Saw mill was burned, but will rebuild right away. W. J. WHITAKER.

DECATUR, ALA., April 23, 1888.

Editor Manufacturers' Record:

We started a brick-yard on the 17th inst, and expect to be able to make about 20,000 per day. E. D. SPARKS.

The Danger of Advertising in the Manufacturers' Record.

OFFICE OF J. L. GIBTON,

Dealer in Real Estate Coal, Mineral and Timber Lands.

WINCHESTER, TENN., April 20, 1888.

Editor Manufacturers' Record:

Some time ago I reported to your paper that a 100 barrel roller mill would be built at this place. Your paper got it that I was interested in the concern and so printed it. Right there began all my trouble. At that time I was a handsome man, fat, jolly and weighed 185 pounds. Now I am lean and hollow-eyed, and move around with feeble, tottering steps, and all caused by that two-line article in your paper, which was copied by every trade paper in the United States and Canada. Every trade has vied with each other to see who should get my order; every manufacturer of engines, boilers, grates, pumps, water wheels, belting, shafting, pulleys, hangers, and in fact everything in the line of machinery, has flooded our office, almost requiring extra mail sacks, and aside from this, engineers, firemen, millers, millwrights, carpenters, masons and workmen of all descriptions are writing for jobs, begging for a job, and when we do not reply they send us another, then send self-addressed stamped envelopes for reply, thus taking time at night, after our hard day's work is done. We have to spend weary hours answering these appeals for an order or a job, which again causes trouble in the family, for our good spouse declares that no honest man will keep such late hours. She accuses us of being anti-prohibition or something worse, when in fact it is an overdose of misapplied printer's ink. Now, Mr. Editor, please say to these friends that we do not need any machinery. All that we need is a few train-loads of enterprising Yankees, with plenty of money, to buy our real estate. If any man doubts the value of the MANUFACTURERS' RECORD as an advertising medium, let him just say through your columns that he proposes to start something, and he will soon have business on his hands. It has almost ruined my youthful prospects, and given my partner quick consumption. J. L. GIBTON.

Canning Factories.

"I do not know of any investment which pays better than a canning factory," said Mr. N. S. Storrs, of Vernon county, Missouri, a man experienced in the canning business, recently. "Ordinarily they will return from 25 to 40 per cent., and even more where judiciously managed."

You can dispose of the goods just as fast as they are ready for the market, and that feature enables you to transact the business with a comparatively small capital. As the work is done in summer a cheap building will answer all requirements, and that, together with the machinery for a large business, will not cost over \$3,000. That money would provide a factory giving employment to 100 women and girls, and the disbursements each week for vegetables and labor would run from \$800 to \$1,000. An active woman earns about \$1 per day.

Tomatoes, corn and peas are the staples. One acre of tomatoes will ordinarily produce 400 bushels, which, at 25 cents per bushel, will yield \$100. Sweet corn is bought in the husk at \$7 50 per ton. Peas are bought at 50 cents per bushel.

In January the company sends a man out among the farmers and contracts for the growth of the supplies, thus insuring certainty of production. The company furnishes all the seeds.

A company can make its own cans at less than two cents each, and one bushel of tomatoes will make twenty 3 pound cans. The cost of labor, labels and boxing in canning is very small on one can, and tomatoes are now wholesaling at \$1 20 per dozen, a price unusually high on account of the scarcity of the present season's crop. But at \$1 per dozen, the usual price, there is a large profit in the business. There is even a larger profit in corn than in tomatoes."

Literary Notes.

THE 15th annual issue of Saward's Coal Trade Journal is out. There has been a steady improvement in its material and make up every year. It is the standard authority on the subject of which it treats, being so esteemed by all governmental and State officials. Reference to the coal industry of the Union, always has coupled with it the name of this volume or of its author, or the weekly newspaper devoted to the trade and known as The Coal Trade Journal, which is not only the authority in its own trade, but one of the foremost of the class journals of the country. No other business touches so intimately the daily life of the people, as that which engages in supplying their fuel, and this volume will be found interesting in view of the growing importance of the fuel problem. The numerous statistical tables are of inestimable value, being thoroughly authentic and reliable, and the figures given are the result of great industry. In this book is information not otherwise available, in a convenient form and it covers about everything in this important industry that it is really desirable to know. The publisher is Mr. Fred. E. Saward, New York.

Building Flour Mill.

STURGIS, KY., April 23, 1888.

Editor Manufacturers' Record:

I am now putting up building for 60 to 70-barrel flouring mill, and am now ready to contract for the mill machinery.

D. A. BROOKS, JR., & Co.

Erecting Electric Light Plant.

JOHNSON CITY, TENN., April 23, 1888.

Editor Manufacturers' Record:

Johnson City Electric Light Co. have poles and apparatus ordered, and work is proceeding as rapidly as possible.

J. I. WEILER, JR.

JACKSONVILLE, TEXAS, April 21, 1888.

Editor Manufacturers' Record:

We have organized the Jacksonville Canning & Manufacturing Co. with \$5,000 capital for the purposes of canning vegetables, fruits, &c., and for manufacturing various articles. J. L. DOUGLAS, Sec'y.

Blast Furnaces Wanted.

The Athens Mining & Manufacturing Co., Athens, Tenn., are erecting \$500,000 new manufacturing improvements upon their property, and are opening, with a new railroad, the finest iron fields in the South. They desire to have one or more blast furnaces located at Athens, and make the following offers to iron manufacturers and capitalists:

1. They will donate an excellent site free of cost, and in addition will give \$10,000 cash subsidy upon closing of contract and execution of satisfactory bond for the erection, as soon as practicable, of a furnace with 100 tons daily capacity; or will donate site and subscribe for \$25,000 stock. The same offers are made proportionately for furnaces of less capacity.

2. They will lease the mines upon royalty or will deliver at furnace both red and brown ores, superior in quality to any at present mined in the South, and which will yield not less than 50 per cent. in the furnace, at say \$1.25 to \$1.50 per ton, or any way 10 per cent. less than ores proportionately rich cost Chattanooga furnaces. They will contract to deliver any number of tons daily. Lowest freight rates will be obtained on manufactured products to markets.

The finest limestone can be had on the property for cost of quarrying.

Coke can be had at Chattanooga prices. Analysis of the ores will be furnished upon application. No place in the United States has better advantages than Athens for the cheap manufacture of superior iron.

The company reserves the right to select any one or two of such propositions as may be received.

Correspondence solicited.

R. J. FISHER, Treas. and Gen'l. Man.

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Ice Factory to be Built at Anniston.

MONTGOMERY, ALA., April 19, 1888.

Editor Manufacturers' Record:

We have just closed a contract with the Alabama Ice Co., a company organized last week, of Anniston, Ala., for one of our 10 ton ammonia absorption ice machines. Plant will cost about \$20,000.

MONTGOMERY IRON WORKS.

Electric Light Plants to be Established.

HAGERSTOWN, MD., April 21, 1888.

Editor Manufacturers' Record:

The Schuyler Electric Light Co., of Middletown, Conn., last week closed sale of electric light plant for Martinsburg, W. Va., and this week for one here. The sizes will likely be about 45 arc and 1,000 incandescents for the former, and 100 arc and 2,500 incandescents for the latter.

S. E. L.

PINEVILLE, KY., April 18, 1888.

Editor Manufacturers' Record:

We will start our brick-yard about April 21. Have a courthouse and a jail to build.

T. P. BRAWNER.

PIGEON RUN, VA., April 19, 1888.

Editor Manufacturers' Record:

Mr. Robt. Massie and others speak of starting lumber mills near this place some time soon, or as soon as the new railroad is completed.

W. E. NICHOLS.

C. R. MAKEPEACE & CO.
ARCHITECTS and MILL ENGINEERS
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

LOCKWOOD, GREENE & CO.

MILL ENGINEERS,
NEWBURYPORT, MASS.

PLANS AND SPECIFICATIONS FURNISHED FOR THE CONSTRUCTION OF COTTON AND WOOLEN MILLS.

WM. O. WEBBER,
Mill Consulting Engineer,

88 MASON BUILDING, - BOSTON, MASS.

SPECIALTIES.—Measurement of power. Designing and installation of motive power and manufacturing plants. Hydraulic Engineering.

SAN ANTONIO, TEXAS,
Is an excellent location for manufacturers in nearly every line. For investors, climate seekers and immigrants unsurpassed. An extra opportunity for Canning Factories. For descriptive pamphlet address
L. M. GREGORY, Secy. Citizens' Association,
SAN ANTONIO, TEXAS.

THE GARDEN SPOT OF ALABAMA.

Unsurpassed by any other Place in the United States.

A Pamphlet giving a partial description of BREWTON and its surroundings, its unequalled climate, the many advantages for capital seeking investments in farming or factories, will be sent free, on application to

BREWTON, ALA.
H. H. MALONE,
C. F. RANKIN,
C. D. HENDERSON.
March 24, 1888.

GREEN FOREST,
Rockbridge County, Va.

Best location in the State for a Furnace. Vast beds of rich Buena-Vista iron are at hand. Coke at less than three dollars per ton. Eight acres for a site offered FREE on the S. V. R. and the R. & A. Railroad. Best location for a Paper Mill. Supply of soft wood unlimited. Two acres FREE for a site.

Best location for a Woolen Mill. One acre FREE for a site. Large water power available. Write to

H. C. MOONAW.

West Point, Va.

A growing town. Property increasing in value. *Factories invited.* New enterprises exempt from taxation.

Splendidly located on York river.

Steamer lines to Europe, New York—Baltimore, &c.—

Oysters and fish in unlimited abundance. Surrounded by the great fruit and trucking country of Virginia. For any particulars desired, address,
E. WILKINSON, MAYOR.

Brown Ore Lands.

5,000 Acres
Brown Hematite
Iron Ore & Timber
Lands for Sale.

We have for sale about 5,000 acres of Brown Hematite Iron Ore Lands. The ore on this property is practically inexhaustible. THOUSANDS OF TONS VISIBLE TO THE EYE. *The quality is equal to any in the South,* being low in phosphorus, and will average fully 56 per cent. Metallic Iron. We invite inspection and examination. It is situated about two miles from the main line of railroad, and with a branch built over a very feasible route two or two and a half miles in length, the ore can be placed on the cars at a cost of from 25 to 40 cents per ton. This property is also heavily timbered with Yellow Pine, and the water privileges unexcelled. Contracts can be made to supply thousands of tons of these ores to furnaces contiguous at prices ranging from one to one and a-half dollars per ton, f. o. b. at the mines. Apply to

REES & CAMFIELD,
Anniston, Ala.

TOWN LOTS

At Public Auction on Easy Terms.

Special Trains and Special Rates.

A Rare Chance to Make a Splendid Investment in a Rich and Growing Section of Country.

The Mississippi & Tennessee Iron and Manufacturing Company Invite Earnest Investigation.

The Mississippi and Tennessee Iron and Manufacturing Company was organized March, 1887, with capital stock of one million two hundred thousand dollars (\$1,200,000) divided into shares of one hundred dollars (\$100) each. (Now for sale at this office at \$33.33 1/3 per share.) Will sell at auction town lots at Duck Hill, Miss., May 1, 1888. Terms of sale, one-third cash, balance in one and two years, with 6 per cent. interest on deferred payments. Trains will be run by the Illinois Central Railroad, and special rates given those wishing to attend the sale.

Mines belonging to this corporation east and west of Duck Hill cover an area of about 8 by 40 miles long. Contains as high grade Limonite ore as can be found in the South. Fire brick and tile machinery will be in operation in thirty days. This company invites bids on charcoal blast and coke furnace. Duck Hill is on the main line of the Illinois Central Railway, 112 miles south of Memphis.

The water supply is sufficient for a population of sixty thousand—(ten flowing wells.) The drainage is unsurpassed. To those wishing to locate in a new and growing mining and manufacturing city, the company invites the earnest investigation of the advantages presented. For further information call on or address

G. T. MAYS,
SECRETARY AND MANAGER,
336 Front Street, Memphis, Tenn.

ROBT. S. MCCORMICK, P. H. SMITH, JR., AU'T.
President. Manager.

Lenox Law & Collection Co.
ROOMS 53 & 54, 88 WASHINGTON ST., CHICAGO.

We respectfully solicit Collections from Bankers, Merchants, Corporations and Individuals. Refer to any Bank in Chicago.

P. E. STANLEY, S. P. MCCONNELL,
Sec'y & Treas. Attorney.

FOR SALE.

A SECTION OF SPLENDID COTTON LAND IN QUITMAN CO. MISSISSIPPI. Heavily covered with VALUABLE HARD WOOD TIMBER. This soil is unsurpassed in fertility, and will YIELD OVER TWO BALES OF COTTON PER ACRE. A GREAT BARGAIN FOR CASH. Address
W. H. T.,
Care MANUFACTURERS' RECORD.

Broom Factory for Sale.

A complete outfit for sale. To a purchaser who will manufacture at this place, unusual facilities in the way of power, handle material, &c., will be granted.

BRADFORD & ROSS,
BRADFORDVILLE, LEON CO., FLA.

FOR SALE

At a low price and in good running order, the following Cotton Machinery:

1 Danforth Railway Head.
1 Danforth Drawing Frame, of 8 heads, 3 deliveries each.
6 Danforth Cap Frames, 144 spindles each.
1 Spooler; 30 spindles, 4-inch space, 5-inch traverse.
1 Drum Spooler, for 30 6-inch spools.
11 36-inch Danforth Looms.
Also have one 66-inch American Water Wheel, with upright shafting and pair of bevel gears; wheel runs with sun.

Most of this machinery can now be seen running in our Mill at this place

PATTERSON & FRY,
Bluff City, Tenn.

FOR SALE.

1 36-in. 1 Beater Breaker Lapper.
1 36-in. 1 Beater Finisher Evener. } English.
1 36-in. 3 Beater Kisson, with preparator.
1 36-in. 3 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.
1 36-in. 1 Beater, Whiting's.

All this machinery is first-class.

L. GODFREY & CO.
PROVIDENCE, R. I.

FOR SALE.

On Shenandoah Valley R. R., direct line South. Foundry and Machine Shop of Shenandoah Valley Manufacturing Co. Plant and Equipment, for Brk & Mfgs. Good Machinery. Wood and Iron. For descriptive circular, address
GEO. M. BELTHOOVER, Trustee,
Shenandoah, Jefferson Co., W. Va.

Cotton and Woolen MACHINERY.

50 Crompton Fancy Cotton Looms, nearly new, 36 inch reed space, for 12 Harnesses, 4 boxes at one end, 1 at the other.

My Store Houses here have over 3 ACRES of storage, which is covered with good machinery, including nearly full systems for Cotton and Woolen Mills.

JEREMIAH CLARK,
Lowell, Mass. Office, 108 Middle St.

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Logging, Mining and Plantation

RAIL AND TRAM ROAD.
Light Sections Rails and Spikes in stock. Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.
HUMPHREYS & SAYCE,
OFFICE NO. 1 BROADWAY, N. Y.

FOR SALE—SECOND-HAND Railway Equipment.

We offer the above at low prices or cash or on easy terms or Car Trust; or will exchange for good securities. Whether you wish to buy, sell or trade, it will pay you to write us for full particulars.

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Successors to Walkley & Co.

10 WALL STREET, NEW YORK.
JAMES I. WALKLEY, Pres't. L. V. WALKLEY, Sec'y.

Second-hand Machinery in Good Order.

FOR SALE CHEAP.
1 Engine Lathes, 30 in. x 20 ft.
1 Engine Lathes, 24 in. x 14 ft.
1 Engine Lathes, 24 in. x 14 ft. Triple Geared.
1 " 36 in. x 7 ft. 1 Engine Lathes 18 in. x 8 ft.
1 " each 24 in. x 20 in. and 20 ft.
1 " 24 in. x 12 ft. bed. 7 ft. 6 in.
1 " 30 in. x 25 ft.
1 " 24 in. x 13 and 16 ft.
1 " 20 in. x 20 ft.
1 " 18 in. x 20 ft.
1 " 20 in. x 20 ft.
1 " 20 in. x 12 ft.
1 " 16 in. x 12 ft. and 10 ft.
1 " 24 in. x 6 ft.
1 " 20 in. x 5 ft.
1 " 15 in. x 6 ft.
1 " 11 in. x 4 ft. and 5 ft.
1 " 10 in. x 3 1/2 ft. Foot power

1 Brass Turbine Lathes.
1 Planer, 24 in. x 24 in. x 5 ft.
1 " 20 in. x 20 in. x 5 ft.
1 Planer, 24 in. x 24 in. x 5 ft.
1 Screw Planer, 18 in. x 3 ft.
1 Shaper, 6-in. stroke. 1 12-in. Shaper, two tables.
1 " each 12, 15, 20 and 24 in. stroke.
1 24-in. Handley Shaper.
1 Crank Planer. 1 Lincoln Pat. No. 2 Millers.
1 each 3 and 6 Spindle Gang Drill.
1 each Nos. 1 and 2 Screw Machines. Wire Feed.
1 Pratt & Whitney. Good as new.
1 372-lb. Drop Hammer. Beecher & Puck.
1 each 40 & 60 lb. Vertical Hammers.
1 No. 53 Ferracute Press. 1 Nut-Facing Machine.
1 Foot Presses, assorted. 8 Power Presses, assorted.
1 Punching and Shearing Machines, assorted.
1 Return Tubular Boilers, 25 H.-P.
1 National Bolt Cutter, size 1/2 in. to 1 in.
1 Bolt Cutter, 1/2 in. to 1 1/2 in. Good order. Ad head. Merriman.
1 Bolt Cutter, 1/2 in. to 1 in. Adj. head. Sellers.
1 each Nos. 2 & 3 Garvin Hand Millers. Good as new.
1 Horizontal Engine each 25 and 45 H.-P.
1 on 4 and 8 H. P. Portable Engine.
1 2-Spindle Profiling Machine.
1 Horizontal Boring Machine, 36 in. x 6 ft.
1 No. 136 Scales & Parker Presses.
1 36-in. Band Saw. Rogers.
1 Power Mortising Machine.
Also full line of New Machinery.
New York Agency TAYLOR MFG. CO., Engines, Boilers, &c. Correspondence solicited.
PRENTISS TOOL AND SUPPLY CO.,
P. O. Box 146. No. 22 Dev St., New York City.

Patent Link Grinding Machine.

This machine, invented by Byron E. Parks, of Big Rapids, Mich., and built by Pedrick & Ayer, of Philadelphia, Pa., is designed to quickly and accurately fit up hardened links and blocks. After the links are planed up they are case-hardened and always spring some; this makes it necessary to grind the space and the block. When ground free hand, the usual way the space and block are ground so as to work freely, the true radius is always lost as the curve

and invite every planter, farmer and merchant who wants a press to give it a close inspection and careful examination before buying.

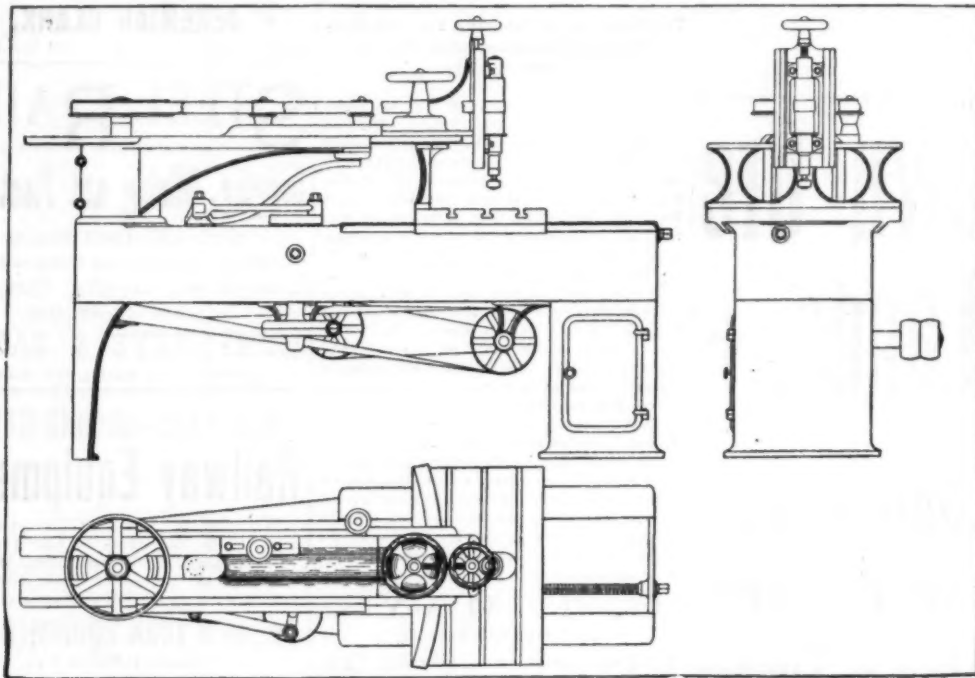
It stands to-day without an equal for power, strength, simplicity, durability and rapidity, and is far superior in all respects to any hand press made. It has automatic ends which are removed by the rise of follower when bale is packed, and leaves ample space at each end of bale so the bagging can be adjusted and the bale removed without effort.

Ordinary laborers can put it together in half an hour.

It is impossible for this press to get out of order without gross neglect or carelessness, and with proper attention it will remain in good order and serviceable for many years.

It is within the reach of all good farmers, and no raiser of cotton or hay should be without one. Their great durability, marvellous power, unrivalled speed and perfect convenience, or in a word, their great superiority over all presses whether for

We take pleasure in calling attention to the advertisement of the Chickasaw Land Co., of Memphis, Tenn., contained in this issue. That advertisement sets forth in graphic terms many of the advantages offered the public in the purchase of the property, the sale of 2,000 building lots of which will take place at Memphis, Tenn., on May 2, 3, 4 and 5 proximo. This property is contiguous to the city, and is exactly in the direction of the city's growth and development. The lots are high and healthy, and are midway between the heart of the city and the beautiful Prospect park, and, being on the line of the Steam Motor Railway, access to the city is both easy and prompt. The company, desiring to place these lots within the reach of all, have decided to sell for one-third cash; balance in one and two years, with 6 per cent. interest added to the deferred payments. The rapidly growing population of Memphis has created a large demand for homes, and that the public may be the better supplied with residences combining both comfort and convenience, the Chickasaw Land Co. has been organized to build houses and supply homes. Memphis is situated in the midst of a most prosperous section of country, and does a business annually of \$150,000,000, and its advantages for commerce by both river and railroad are so great that it must soon become one of the leading cities of the country, and we recommend both capitalists and those seeking a place of business or residence to attend the sale of lots referred to, believing that profitable investments can be had there on the dates named. T. A. Lamb, the secretary and manager, will furnish those interested with pamphlets, circulars and general information upon application.



PATENT LINK GRINDING MACHINE.

straightens. With this machine any radius can be quickly ground true, either the block, link and face of the link. It consists of a frame, carrying an arm mounted with an emery wheel; this has an automatic feed up and down, exposing all the surface of the wheel to the work, keeping the wheel true; it has an automatic swinging movement, the arc of the circle to be ground; it is driven by an overhead counter-shaft and occupies small floor space. The cuts are made from drawing of machine. Messrs. Pedrick & Ayer, 1025 Hamilton street, Philadelphia, will give any further information desired.

The Monarch Baling Press.

The working of the Monarch baling press, shown in the illustration, can be readily understood by a glance at the illustrations and the following brief explanation:

The large ratchet wheels have cone drums, to which are fastened one end of the chains, the other end being bolted on follower. When the lever is worked up or down these wheels move forward, the chain is wound up on the cone drum and the follower raised up, which presses the bale. When the follower reaches the movable ends the ends rise with it until the frame enters the notches, and the ends are then left free to be taken out, and when removed the space between each end of bale is sufficient to allow the bagging to be arranged and bale to drop out when the top is up and follower lowered a little.

The great power of this press can be seen at once, and as only two revolutions of large wheels are required to press a bale in the 8-foot cotton press, the great speed can also be perceived at a glance. A bale of hay requires less time to press, as the box is smaller.

The manufacturers make the following claims for this press: "We offer it to the public as the best hand press in the world,

Two ordinary farm laborers can pack with ease 500 or 600 pound bales of cotton; but we have it arranged so four men can be worked if desired.

The work on our press is performed by good mechanics—first class timber is used. The chain is tested to twenty tons pressure, and great care is taken to see that every brace, bolt and all other material is perfect in itself.

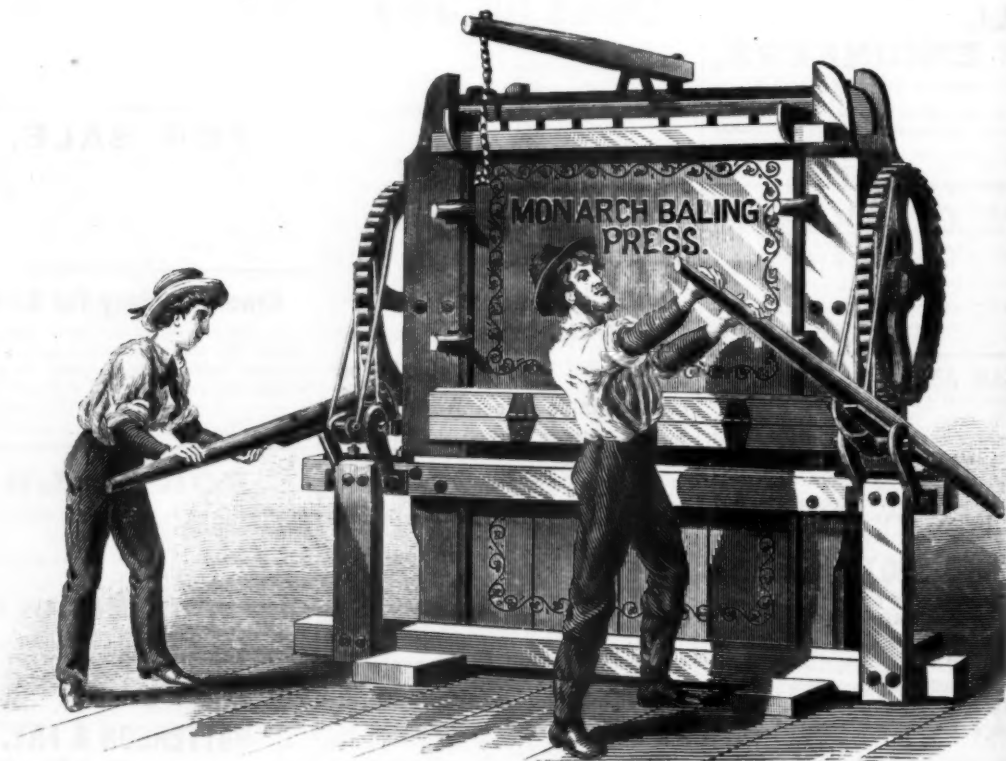
Every press is set up and thoroughly tested before leaving the factory, after which it is taken apart and carefully packed in suitable parcels for shipment.

hand or power, will make them a general favorite in any market."

Any further information will be given on application to the manufacturers, Wrenn, Whitehurst & Co., Norfolk, Va.

THE first of the four great furnaces of the Tennessee Coal, Iron & Railroad Co. at Ensley to be completed went into blast about two weeks ago, and about the fourth or fifth day after commencing work made in one day 185 tons of iron.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



THE Best Investment in the South.

TO INVESTORS AND BUILDERS!

There will be sold at Memphis, Tenn., at

Public Auction

May 2, 3, 4 and 5,
2,000 LOTS

In the Chickasaw Land Company's addition to Memphis. A finer opportunity for profitable investment was never offered. The tract is contiguous to the city, and a steam motor line, known as the Prospect Park and Belt Railway, splendidly equipped and running at short intervals, gives every facility for quick communication with the business centers. The ground is high and healthful. The population of Memphis has doubled within seven years. New industries are constantly being established. The general business amounts to \$150,000,000 a year. Nine railroads center in the city, and two others are under way. A great

Trans-Mississippi Bridge

will soon be built. The development of the city is rapid, magnificent, but due entirely to its unrivaled location for a commercial metropolis. The city has been well named "THE QUEEN OF THE VALLEY," for it is the natural entrepot of a region vast in its resources and unapproachable in the variety of its products. The local builders are unable to keep up with

—The Demand for Homes—

from newcomers. The Chickasaw Land Company has been organized for the purpose of meeting this demand. The tract now offered for sale lies midway between the city's center and Prospect Park—a beautiful public resort of 125 acres—in which direction the city's growth tends.

Terms: One Third Cash, balance in 1 and 2 Years, with 6 per cent. interest on deferred payments.

Pamphlets and circulars will be sent immediately on request. Address

T. A. LAMB, Secretary and Manager,

The Chickasaw Land Co.

No. 5 Monroe Street, Memphis, Tenn.

GEORGE MOERLEIN,
President.

JOHN GORTZ, JR.,
Vice-President.

J. A. EBERHARDT,
Sec'y, Treas. & Gen'l Mgr.

The SOUTHERN GRANITE CO.

Quarries at LITHONIA, REDAN and STOCKBRIDGE, GA.

General Contractors in Granite.

We take pleasure in announcing that we are now prepared to furnish estimates upon the finest quality of

LITHONIA GRANITE

FOR ANY AND ALL PURPOSES, ESPECIALLY IN THE LINE OF

Fine Architectural, Monumental and Street Paving Work.

Samples, Plans, Specifications and Estimates will be Promptly Furnished.

PRINCIPAL OFFICE:

20 Kimball House, ATLANTA, GA.

BRANCH OFFICES:

19-20 Higgins Block, CINCINNATI,
And LITHONIA, GA.

THE NEW IMPROVED HEAVY STEAM-POWER Quaker Brick Machine AND Spiral Pug Mill.

CAPACITY,
30,000 to 40,000
PERFECT BRICK PER DAY.

Works in all kinds of
clay and is a great saving
in labor and expense.

WE contract to furnish
complete Brick-Yard
outfits—engines and every-
thing needed, complete.
Write for our handsomely
illustrated cata-
logue containing
valuable infor-
mation to brick
makers.

Estimates and
plans furnished.
Correspond-
ence solicited.

Address,

FLETCHER
& THOMAS
INDIANAPOLIS, IND.

Mention this
paper.



PERFECTION BRICK PRESS,

An easy-working, quick-operating and powerful press. Will successfully press brick made on any Brick or Tile Machine.

The Wrought-Iron Tempering Wheel,

The most thorough mud temperer known. Tempered faster, mixes better and runs lighter than any wheel made.

Barrows, Trucks, Molds, Kilm Doors, &c.

Write us for prices.

C. W. RAYMOND & CO.
DAYTON, O.

Mention Manufacturers' Record.

THE Very Latest and Best—Brick and Clay-Working Machinery, —OUTFITS AND SUPPLIES.—



Mention this paper and receive our elegantly illustrated Catalogues containing colored engravings of brick, tile, etc.

J. W. PENFIELD & SON, WILLOUGHBY, Ohio.

FREY'S NEW BRICK AND TILE MACHINE

40,000
BRICK
PER
DAY

With Automatic CUT OFF.

THE VERY BEST

from 1 to 20 inches (3 styles) CLAY CRUSHERS
Machines with or without Crushers. 6 different Brickmachines.

Address FREY, SHECKLER & HOOVER, MUYRUS, OHIO.

It will pay you to write to WILLIAMS ENGINE CO., 447 North St., Baltimore, Md., for
AUTOMATIC
ENGINES,
 For any duty. Electric Light Engines a specialty. Quality high. Prices moderate. Address
WILLIAMS ENGINE CO.
 447 North Street, Baltimore, Md.

CHEAP FARMING LANDS SOUTH

It is a recognized fact that the cheapest farming lands in America to day are in the South, and men of much or moderate means looking for real estate investments, or permanent homes, should not fail to visit the following points, where so many northern people are now settling, viz: Jackson, Tennessee; Aberdeen and Jackson, Mississippi; Hammond, Crowley, Jennings, Welsh and Lake Charles, Louisiana. Round-trip tourist tickets, limited to June 1st, 1888, with stop over privileges south of Cairo, Illinois, are on sale to New Orleans, Jennings and Lake Charles. For rates apply to nearest ticket agent, and be sure your tickets read via the Illinois Central Railroad from Chicago or St. Louis. For pamphlet entitled "Southern Home-Seeker's Guide," and circulars concerning the above named points, address the undersigned, at Manchester, Iowa.

J. F. MERRY.
 Gen. West. Pass. Agt.

A. HOEN & CO.

LITHOGRAPHERS, BALTIMORE MD.

Our facilities for the production of

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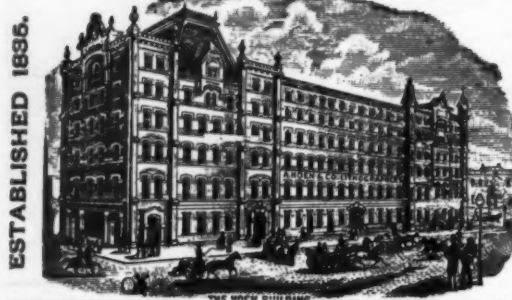
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MANUFACTURERS OF ALL DESCRIPTIONS OF

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Makes the Litigation of Land Titles a specialty. Will also Lend Money for non-residents upon the best real estate security.

Interesting to Travelers South.

The section of the South attracting by its wonderful development and prosperity the attention of the whole world is traversed by the Queen & Crescent Route, (Cincinnati Southern and Associate Roads) Express trains, the fastest in the South, leave Cincinnati daily at 7:55 A. M. and 8:00 P. M. for Chattanooga, Birmingham, Atlanta, Decatur, Gadsden, Tuscaloosa, etc. When going South, do not fail to procure from your nearest agent tickets which read via Cincinnati and the Queen & Crescent Route. Inquiries promptly responded to by H. Colbran, General Passenger Agent, Cincinnati.

GET • THE • BEST. THE HERCULES WATER WHEELS

Are the Best Water Wheels ever made.

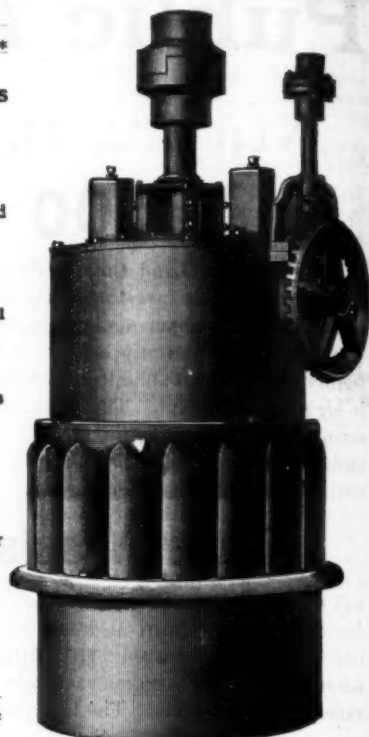
A Good Water Wheel Increases
 The Value of Your
 Whole Plant.

Get the Best at First, and Avoid
 the Expense and Delay of
 Changing the Wheels.

A Good Wheel will serve you
 well for Twenty Years

The Best is the Cheapest. It Does
 More Work, Lasts Longer, and
 Costs no more for Gears
 and Setting than a
 Common Wheel.

The Hercules Gives the Most Power
 for its Size and the Highest
 Average Percentage from
 Full to One-half Gate
 of any Wheel
 ever made.



THE HERCULES WHEELS IN THE SOUTH.

| When ordered. | Name and Address. | Size of Wheel, Inches. | When ordered. | Name and Address. | Size of Wheel, Inches. |
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If you want to buy a new water wheel, if your old wheel does not give absolute satisfaction, if you would like to know just how perfect a water wheel can be made, or if you are in any way interested in water wheels, it will pay you to write for CATALOGUE NO. 3 to the

HOLYOKE MACHINE CO.
 WORCESTER, MASS.

ROME, GA.


OF all the growing cities in the growing South, Rome presents the greatest opening for money-making investments, with surrounding fields as rich as the lands of Goshen, with exhaustless deposits of brown and red Iron Ores and Manganese immediately at hand on all sides, with mountains of Marble and Limestone coming right up to the city, with an abundance of the best Coal easy of access, areas of untouched forests, and with seven railroad outlets and two navigable rivers, Rome stands, in natural advantages, pre-eminently above any other proud and pretentious city within the limits of this proud and ambitious commonwealth.

The HEALTH OF ROME is unsurpassed. The unusually low death rate is a phenomenon, standing without a peer at 8.40 per thousand. Not one case of catarrh or consumption exists or ever originated within her limits.

Rome has 12,000 inhabitants, has invested in colleges and school buildings about \$300,000; in church building over \$100,000; in her new hotel \$125,000; in the dummy line, just completed, over \$50,000. Her manufactories employ 800 hands, with other enterprises now going up. Her system of water-works and sewerage is unsurpassed. The city is lighted with gas, and negotiations for an electric light plant are now pending. The highways leading to the city are all well macadamized. The Post-office Department has recently made Rome a free postal delivery office. The annual business of the city is about \$12,000,000, with the trade constantly increasing. The yearly range of temperature at Rome, between the average highest and lowest, is about 84 degrees; the mean temperature is 60.6 degrees. About seven months intervene between the first and the last killing frosts of the year. There is no better society to be found anywhere.

The Rome Land Company (J. W. Rounsaville, President, T. F. Howell, Treasurer, and J. L. Bass, Secretary and Business Manager) will donate ample grounds to, and otherwise aid, any worthy manufacturing enterprise that may locate here.

Send for circulars and pamphlets.

 **A Public Sale of splendidly located town Lots will take place on April 26 and 27. Easy terms to purchasers will be made.**

ATHENS, East Tennessee,

THE COMING

→ Iron and Manufacturing City of the South. ←

Athens is the county seat of one of the most fertile counties in East Tennessee. The health of the city is unsurpassed, and is **ABSOLUTELY FREE FROM ALL MALARIAL OR EPIDEMIC DISEASES**. The surrounding scenery is very fine. From the main avenue the whole valley of East Tennessee can be seen, from the Cumberland Mountains on the west to the Great Smoky Mountains on the east; some of the tallest peaks east of the Rockies being in full view. **FINE MINERAL SPRINGS** are adjacent and are popular summer resorts. The society of Athens is excellent. A cordial welcome is extended to all law-abiding people locating in the town. The **EDUCATIONAL FACILITIES** are good. Beside public and preparatory schools, Athens is the seat of **THE GRANT MEMORIAL UNIVERSITY**, which has an enrollment of over 300, and whose graduates include some of the most distinguished citizens in the country. Among the industries and institutions of the place in active operation are:

THE ATHENS BUILDING & LOAN ASSOCIATION, \$250,000. **THE ATHENS WOOLEN MILLS, \$100,000.**

THE FIRST NATIONAL BANK, \$50,000.—To be increased at once.

FOUNDRY & MACHINE SHOPS, \$25,000.

FURNITURE WORKS, \$15,000.

FLOURING MILLS, \$20,000, etc.

500 men are now at work on the new railroad from Athens to the

RICHEST IRON FIELDS IN THE SOUTH.

JUST EAST OF THE TOWN.

Only eight miles from Athens are **VEINS OF RED FOSSILIFEROUS ORE 11½ FEET THICK**, and 4 to 12 miles beyond are **THE LARGEST DEPOSITS OF BROWN ORES IN THE SOUTH**. The ores of both varieties, in addition to being inexhaustible, are both superior in quality to any ores of either variety at present mined in the South. An assertion that can be sustained. Coke can now be obtained at the lowest prices, and in addition a new railroad is now projected to the Cumberland Coal Fields, only 22 miles distant. These roads will give Athens **UNSURPASSED SHIPPING FACILITIES**. The road under construction will penetrate large deposits of Tennessee Variegated Marble; also an Unopened Timbered Region, and will develop the

Largest Colored Slate Deposits in the United States.

These quarries are now being opened, and are pronounced by experts Absolutely Inexhaustible, and equal in quality to the finest Vermont Colored Slate.

The ATHENS MINING & MANUFACTURING CO.

Have alone just contracted for the erection of over

\$500,000 IN NEW MANUFACTURING ENTERPRISES

At Athens, including a 100-ton Blast Furnace, cost \$200,000; Cotton Mills, cost \$150,000; Furniture Works, employing 200 men, cost \$100,000; Hotel, cost \$60,000; Water Works, Street Car Lines, &c. These improvements have been commenced which, added to other improvements projected, will add

\$1,000,000 OF NEW MANUFACTURING ENTERPRISES TO ATHENS.

The company desire to open correspondence with parties desiring to locate, and will extend liberal inducements in addition to gifts of sites in order to induce New Manufacturing Enterprises to locate in Athens. City property is doubling in value every few months, and at present low prices is beyond question a very fine investment.

The Athens Mining & Manufacturing Company,

R. L. BRIGHT, President

R. J. FISHER, Secy. and Genl. Manager,

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH. 

AS A CITY OF

Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last few months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.

United States Rolling Stock Company's Plant, from Urbana, Ohio,
\$1,000,000.

Louisville & Nashville Railway Construction Shops, \$300,000.

Charcoal Company's plant, costing \$120,000.

A seventy-ton Charcoal Iron Furnace, costing \$190,000.

A one hundred-ton Blast Iron Furnace, costing \$225,000.

The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.

The American Oak Extract Company's plant, costing \$60,000.

Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.

Morse Cotton Compress plant, costing \$60,000.

Southern Horse Nail Company, \$100,000.

Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.

Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.

The Decatur Street Railway Company.

The Plumbers' Supply Co., \$25,000.

The Telephone Company.

The Alabama Lumber & Fruit Package Co.

Brush Electric Light Company, cost \$10,000.

The Ironton Wheelbarrow Company, cost \$25,000.

The St. Louis Investment Company, \$200,000.

Howland & Co's Water Works System, costing \$200,000.

Bleymeyer Artificial Ice Company, cost \$10,000.

Four Mammoth Brickyards.

Jones, Poley & Co's Lumber Yards.

The Hoosier Mills & Building Company.

The Gate City Sash & Door Company.

Decatur Car Wheel & Construction Company, \$60,000.

Arantz Bro's Mills and Lumber Yards.

Grant & Co's Furniture Factory.

Decatur Carriage Company.

Southern Lumber Company.

H. S. Freeman's Mills and Lumber Yards.

The Alabama Farmer's Friend Fence Machine Company.

The Decatur Artificial Stone Company.

Decatur Chain and Architectural Iron Works, capital \$100,000.

Natural Gas Company, capital \$200,000.

First National Bank, capital \$100,000.

The Exchange Bank of Decatur, capital \$100,000.

Merchants' Insurance Company, capital \$100,000.

Decatur Building Association, capital \$300,000.

Decatur Building Company, capital \$1,000,000.

Buchheit's Bottling Works.

Decatur Printing Company.

Two daily papers, three weekly papers.

Two hotels—one \$100,000, completed, and one \$300,000 being built; the largest in the South.

Grand Opera House, \$100,000.

THERE ARE OTHER

* Mammoth Enterprises *

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company.

E. C. GORDON, President.

H. G. BOND, Vice-Prest. and Gen. Manager.

W. T. MULLIGAN, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

FLORENCE, ALA.

County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.

SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

== FAIR FLORENCE. ==

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces,
One Rolling Mill,
Three Planing Mills,

One Saw Mill,
One Flour Mill,
One Wooden-Ware Factory.

One Cotton Mill,
One Cotton Compress and Ice
Factory.

Two Brick Machines and
Three Hand-Brick Yards.

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up **VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay,** and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

TRADE NOTES.

THE Schultz Belting Co., of St. Louis, Mo., have an order for a belt 35 inches wide and 140 feet long from Lancaster Mills, Mass., who have been using their goods since 1881. They are running day and night.

THE Boston Heating Co. have purchased recently 45 Curtis pressure regulators, from $\frac{1}{4}$ to 3 inches in size, to reduce 400 street pressure to from 5 to 80 for heating and power. The larger ones control the pressure on the pumps at the central station.

WHAT is said to be the largest fire-brick company in the world, the Savage Fire-Brick Co., Keystone Junction, Pa., wrote the manufacturers of the "Perfection brick press but recently: "We are well pleased with the press. It is just what we want."

THE Windisch-Muhlhauser Brewing Co., of Cincinnati, Ohio, have placed another order with the Reliance Gauge Co., of Cleveland, Ohio, for their safety water columns, thus showing the faith that this splendidly equipped brewery has in the manufactures of this concern.

THE Diamond Prospecting Co., of Chicago, having found their store at 22 West Lake street too small, have removed to 74 and 76 West Lake street, where they have in stock a complete line of diamond drills, hoisting and hauling engines, steam pumps and other mining machinery.

LODGE, DAVIS & Co., of Cincinnati, O., have just purchased additional ground, and will build at once. Their new works will cover the entire block bounded by Eggleston avenue, Sixth, Culvert and Corkran streets. They contemplate the manufacture of several new lines of machine tools. Are now running to their full capacity, with large advance orders.

CHAS. A. SCHIEREN & Co., of New York, report sales of leather link belting during the past week to the following parties: Copperfield Mining & Smelting Co., South Fairlee, Vt.; The F. Gray Co., Piqua, Ohio; A. H. Fogg & Co., Houlton, Me.; Muscogee Manufacturing Co., Columbus, Ga.; Rand Drill Co., 23 Park Row, New York; Joseph Dixon Crucible Co., Jersey City, N. J.; Standard Horse Nail Co., New Brighton, Pa.

THE W. J. Gordon Lamp & Brass Co., of Cleveland, Ohio, are designing handsomer lamps for the next season's trade than have ever been seen heretofore. This concern will place on the market before long a new burner, giving a clear, soft and steady light, nearly equal in volume and brilliancy to the electric light. Among the new patterns are some very handsome and costly banquet lamps, standing three or four feet in height, with beautifully decorated shades, intended for the use of hotels, etc. They must be seen to be appreciated. Descriptive circulars and catalogues upon application.

In a paper on "The New Croton Aqueduct," of New York, read by Mr. Lee Treadwell, C. E., before the Arkansas Society of Engineers, Architects and Surveyors, the following figures showing the comparative rate of progress in four of the headings and also for the entire line are given:

Highest average record in single heading for the last four months, up to July 3, 1886, with different drills.

| Drill | Weekly | Monthly |
|---------------------------------------|--------|---------|
| Ingersoll drills exclusively..... | 48.5 | 219.8 |
| G. & D. drills exclusively..... | 37.7 | 169.5 |
| Rand & Ingersoll drills together..... | 37.3 | 167.8 |
| Rand drill exclusively..... | 33.9 | 152.5 |

Average monthly progress.

| Heading | For the last four months on the entire line, 47 headings. |
|--|---|
| In thirty headings using Ingersoll drills exclusively..... | 141.8 |
| In thirty headings using Rand drills exclusively..... | 133.6 |
| In twenty headings using Ingersoll & Rand drills together..... | 130.9 |
| In four headings using G. & D. drills exclusively..... | 137.5 |

THE Stearns Manufacturing Co., of Erie, Pa., well-known throughout the country as one of the heaviest manufacturers of large-sized engines, boilers and band saw mills, to accommodate their rapidly growing business, will shortly abandon their old plant to move into elegant new quarters, fully double the size of the old, and fully equipped with the latest and most costly machinery for turning out first-class work at short notice. The products of this concern are well known in the South, where they have many friends who will be pleased to know of their enlarged facilities for business.

THE F. F. Adams Co., of Erie, Pa., manufacturers of household goods and hardware specialties, will shortly place on the market a new novelty not to be surpassed either in finish or price, in the shape of a milk-shake machine. The machine presents a handsome appearance, being nickel-plated, the strong point being that they are noiseless, running with rubber-covered friction gears. They are made for one or two glasses, and are superior in every way to the common noisy machines now in use. Every drug store, bar or hotel using the Sampson cork puller and lemon squeezer will want one or more of these "milk shakes." Write for descriptive circular and prices. Agents can make big money handling them.

VERY long runs made by steam engines are considered rare, and long runs have heretofore been considered several days or a few weeks. The Westinghouse engine has increased this time in many instances to a number of months. The last public notice of a long run made by a Westinghouse engine was a notable instance where a certain engine ran eleven months without stopping at a speed of 300 revolutions. The most remarkable record, however, has recently developed in the Pittsburgh Gas Light Co., where a 10 horse-power Westinghouse engine has run continuously for thirteen months, running at about 500 revolutions per minute, and in that time making 288,000,000 revolutions without the throttle valve being shut, and is still running.

FELTHAUSEN & SHERWOOD, of Buffalo, N. Y., have purchased the stock, patents and good-will of the firm of James Jenks & Co., Detroit, Mich., well known as manufacturers of injectors, ejectors, oilers and various other engineers' supplies and specialties, and will remove that business to Buffalo, N. Y. They have also purchased the business and valuable patents of Mr. E. G. Felthausen, and will continue to manufacture the oil pumps, gauge cocks, flue scrapers and other specialties formerly made by this concern under the above name. Felthausen & Sherwood. This concern now own and control some of the most valuable patents in their line of business, and we heartily commend them to Southern engine builders and steam users generally.

MESSRS. MILNER & KETTIG, dealers in manufacturers' and mining supplies, Birmingham, Ala., have issued the following circular:

"We take pleasure in announcing to our friends and patrons that we have now completed the moving of our enormous stock to our new building on 20th street and Powell avenue. Our new house was built for our especial use, and comprises a total floor space of more than one acre. The entire building is fitted up with the latest improved appliances for the economical and quick handling of merchandise, all calculated on a thoroughly systematic plan to dispatch with business in the best and quickest possible way. Our new office is 65 feet long, and each department separately arranged so as to avoid clerical errors and confusion.

The entire business has been thoroughly systematized, and each branch is in charge of competent men, thereby causing prompt-

ness and accuracy in filling orders, and attention to the wants of our customers.

Besides our new store, we have retained our warehouse on the Belt Railroad, from where we ship all our heavy goods that come in car-load lots, thus saving extra handling and drayage. The latter house is connected with our main store by special wire, so that we can quickly dispose of large orders for heavy goods on very short notice.

We are just fitting up in our new machine shop a new pipe-cutting and threading machine, the largest in the South, and we will soon be able to cut and thread on short notice and at moderate cost wrought pipe from $\frac{1}{4}$ to 12 inches diameter.

We have added largely to our stock, and it is now the largest stock of mining and plumbers' supplies to be found south of Pittsburg.

Having unsurpassed facilities for buying and handling our goods, we are in a position to offer these goods as cheap as any house of the kind in the United States, and large buyers will consult their own interests by getting our prices before placing their orders elsewhere. We trust our efforts will, as on former occasions, be rewarded the liberal and continued orders of our customers and the general trade."

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

SPEAKING of hotels, a New York man expresses himself as follows: "System in the little details of minor conveniences and attendance go further toward making a hotel attractive than anything else. In this the St. James of Baltimore, John S. Crowther, Manager, excels, and without which its location, furnishings, and other fine appointments, would not with me count for anything."

THE St. James Hotel, St. Louis, is elegantly appointed in every particular. Table excellent. American or European plan. Rates \$2.00 and \$2.50 per day. Location in centre of business; corner 5th and Walnut Streets.

No hotel keeps up its standard and good name better than the American House, Boston, and it is noted all over the country for its superior accommodations and most excellent management.

THE Palace Hotel, Cincinnati, Ohio, is the best, finest furnished and most complete \$2.00 hotel in America. 250 rooms; 140 front rooms. Complete fire apparatus and iron balcony fire-escapes.

WESTPHAL'S IMPROVED REVOLVING SCREW BOLT AND SHOT CASES.
ADJUSTABLE FIRE BACKS AND LININGS FOR COOK STOVES.
IRON STORM THRESHOLDS.
SEND FOR ILLUSTRATED CIRCULARS.
SCHENCK'S ADJUSTABLE FIRE BACK CO.
94 MARKET STREET, CHICAGO.

— FOR THE BEST —
BOILER COMPOUND,
ADDRESS
THE INTERNATIONAL MFG. CO.
290 Pearl St., CLEVELAND, OHIO.

BOOKS Relating to Mechanical, Mining and Electrical Engineering. Descriptive Catalogue and information about any book sent promptly on application.

E. & F. N. SPON,
12 Cortlandt Street, - NEW YORK.

Prof. Thurston's New Works.

A MANUAL OF STEAM BOILERS, THEIR DESIGN, CONSTRUCTION AND OPERATION. For Technical Schools and Engineers. By Prof. R. H. Thurston. With the fine illustrations in Text. 8vo, cloth..... \$1.00

STEAM BOILER EXPLOSIONS IN THEORY AND IN PRACTICE. By R. H. Thurston, M.A. Doc. Eng., Director of Sibley College, Cornell University. With many illustrations. 8vo, cloth..... \$1.00

"It is a work that might well be in the hands of every one having to do with steam boilers, either in design or use."—Engineering News.

JOHN WILEY & SONS, Astor Place, N. Y.

Publishers of Scientific and Industrial Works.

Mailed and prepaid on the receipt of the price.



— For the Latest Improved —

FAST FEEDING

Planing Mill Machinery,

ADDRESS THE

Preble Machine Works Co.,

CHICAGO, ILL.

DON'T BUY AN ENGINE OR BOILER

Until you have seen our circulars. Engines complete from 5 to 110 horse power, both Vertical and Horizontal, at prices below those of other reputable makers. 1400 in use. Boilers of every style. Automatic Engines for Electric Lights. Centrifugal Pumping Machinery for Drainage or Irrigation. Established 25 years. Perfect satisfaction guaranteed. Ask for Circular M and address

Morris Machine Works,

BALDWINVILLE, N. Y.

STEAM PUMPS

For every duty. Best Materials only used. Fully guaranteed and tested. It will pay you to write for price.

HUGHES STEAM PUMP COMPANY,

CLEVELAND, OHIO.

Dodge & Swift, New York Agents.



PERFORATED METAL FOR COTTON SEED OIL MILLS RICE MILLS MINING SCREENS & THE ROBERT AITCHISON PERFORATED METAL CO.
76 Van Buren St. Chicago Ill.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, April 25, 1888.

The reports which we publish to-day from all parts of the South show that that section is enjoying great prosperity, and that the farmers are in better financial condition than at any time since the war. This in itself would explain much of the activity in business, and when to this is added the remarkable industrial developments in progress, it is readily understood why the South is at present advancing so rapidly.

In manufactured iron the local market shows no change, business continuing light at former prices, viz:

| | | |
|--|---------|---------|
| Ref. Bar Iron, 1 to 6 3/4 to 1..... | \$ 1.50 | \$.050 |
| " " 1 to 4 3/4 to 1..... | " 1.50 | " .050 |
| " " 3/4 to 1, round and..... | " 1.50 | " .050 |
| " square..... | " 1.50 | " .050 |
| Hoop Iron, 1 1/4 wide and upward..... | " 2.00 | " .050 |
| Blad Iron, from 1 1/4 to 6 in. wide..... | " 2.00 | " .050 |
| Horseshoe Iron..... | " 3 1/2 | " .050 |
| Horsey Nail Rod..... | " 3 1/2 | " .050 |
| Black Diamond Cast Steel..... | " 3 1/2 | " .050 |
| Machinery Steel..... | " 3 1/2 | " .050 |
| Spring Steel..... | " 3 1/2 | " .050 |
| Common Horse Nails..... | " 3 1/2 | " .050 |
| Railroad Spikes, 3/4 x 16..... | " 3 1/2 | " .050 |
| Steel Boiler Plate..... | " 3 1/2 | " .050 |
| Iron Boiler Plate..... | " 3 1/2 | " .050 |
| Boiler Tubes..... | " 3 1/2 | " .050 |

The pig iron market is dull, with but little business doing at present. We quote as before, viz:

| | | |
|--|---------|---------|
| Baltimore Charcoal Wheel Iron (all Baltimore ore)..... | \$ 1.50 | \$.050 |
| Virginia C. B. Charcoal Wheel Iron..... | " 1.50 | " .050 |
| Anthracite, No. 1..... | " 1.50 | " .050 |
| " " 2..... | " 1.50 | " .050 |
| " " 3..... | " 1.50 | " .050 |
| " " Mottled and White..... | " 1.50 | " .050 |
| Old Rails..... | " 1.50 | " .050 |
| Old Steel Rails..... | " 1.50 | " .050 |
| No. 1 Wrought Scrap..... | " 1.50 | " .050 |
| Old Car Wheels..... | " 1.50 | " .050 |

HARDWARE.

The demand for hardware is very good and profits are reported as fair, with a decreasing tendency to cut prices. Manufacturers have made no changes in prices. Machine bolts are somewhat firmer, based on the belief of a new combination of bolt makers. Lanterns are weak, and some low prices have been made, the Owl Lantern Co. having taken very large orders for their hot and cold blast lanterns.

Nails are quoted at \$1.95@2.00.

Philadelphia Iron Market.

PHILADELPHIA, April 24, 1888.

No improvement is manifest in iron or steel. Business is light, despite the low condition of stocks. A good deal of interest is manifested in Southern irons, although up to this hour the sales have not been particularly large. The fact that Southern iron is beginning to sell here, coupled with the fact that the railroad companies have not agreed to reduce freight rates, but have positively refused to do so, makes the outlook for Eastern and Middle Pennsylvania iron makers rather cheerless. The consumers are withholding orders, and are not disposed to yield, even when the best possible concessions are made. No. 1 Southern iron has been selling at \$18.50; No. 2 at \$17, and grey forge at \$16. The corresponding prices for Northern irons are \$20.50, \$19 and \$17, though some brands do not bring this price. Sales of 4500 tons of Bessemer at \$20. Two additional lots are in negotiation. Muck bars are \$39 for good quality; anthracite blooms \$44. The bar iron demand has not improved; prices 1.80@1.95. Nothing can be said intelligently on this point at present. Nails are \$2, which figures are more easily shaded than a month ago. The demand for plate iron is light and prices weak, but mills have not shut down and they are not making stock. Structural iron requirements continue heavy in the aggregate, but no single orders are large. Steel rails are \$31.50. The estimates recently made as to a falling off in demand do not meet with acquiescence everywhere. There are contingencies yet to arise which will have much to do with the activity of steel rail demand during the

latter half of the year. Old rail are \$21. Until the tariff debate is over there will not be a rushing demand in any direction. The foundation has been laid during the past two or three months for an improving demand if the public can rely upon non-interference. The smaller industries are all doing fairly well.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, April 23, 1888.

There is the same story to tell as has been told for the past two weeks. Demand is confined to actual needs, and prices continue slowly to decline. A number of Central and Northern Ohio furnacemen state positively that when their present ore contracts are worked out they will blow out, unless there is an improvement in prices. Stocks remain about as last reported. We quote for cash f. o. b. Cincinnati.

| | | |
|---|---------|---------|
| OHIO AND SOUTHERN STRONG COKE No. 1..... | \$ 1.50 | \$.050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| OHIO SOFT STONE COAL, No. 1..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| MAHONING AND SHENANGO VALLEY COKE, No. 1..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| HANGING ROCK CHARCOAL No. 1..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| TENNESSEE & ALABAMA CHARCOAL No. 1..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |

| | | |
|--|---------|---------|
| STRONG NEUTRAL COKE..... | \$ 1.50 | \$.050 |
| Mottled..... | " 1.50 | " .050 |
| Cold Shortings..... | " 1.50 | " .050 |
| CAR WHEEL AND MALLEABLE IRON..... | " 1.50 | " .050 |
| Southern Car-Wheel Iron..... | " 1.50 | " .050 |
| Hanging Rock Cold Blast..... | " 1.50 | " .050 |
| Lake Superior C. W. and Malleable..... | " 1.50 | " .050 |

Louisville Iron Market.

Specially reported by GAO, H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., April 23, 1888.

There is very little change in the market. A portion of the buyers are holding off, believing they will be able to name their own prices, while others are making purchases for long deliveries, believing that the price of iron is low enough, and don't desire to run the risk of having to pay more. Old wheels are sold on the basis of \$19 at Louisville, and old rails on the basis of \$21. We quote:

| | | |
|--|---------|---------|
| Southern Coke, No. 1 Foundry..... | \$ 1.50 | \$.050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| Hanging Rock Coke, No. 1 Foundry..... | " 1.50 | " .050 |
| " " Charcoal, No. 1 Foundry..... | " 1.50 | " .050 |
| Southern Charcoal, No. 1 Foundry..... | " 1.50 | " .050 |
| Silver Gray, different grades..... | " 1.50 | " .050 |
| Southern Coke, No. 1 Mill, Neutral..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| Southern Charcoal, No. 1 Mill..... | " 1.50 | " .050 |
| White and Mottled, different grades..... | " 1.50 | " .050 |
| Southern Car Wheel standard brands..... | " 1.50 | " .050 |
| " " other brands..... | " 1.50 | " .050 |
| Hanging Rock Cold Blast..... | " 1.50 | " .050 |
| " " Warm..... | " 1.50 | " .050 |

Chicago Iron Market.

Specially reported by ROGERS, BROWN & Co. W. BACKMAN, Resident Agent.

CHICAGO, April 23, 1888.

Some fair sized orders have been placed the past week at figures that a month ago would have looked very low, but that are acceptable now. There is perhaps a little more liberal disposition to buy, but concessions are expected by the buyers, and by holding firm for them they are usually apt to secure them. The only hope of the market, apparently, is to force restriction of output to the point where the consumptive demand is greater than the supply. We quote for cash f. o. b. cars Chicago:

| | | |
|--|---------|---------|
| OHIO (Hanging Rock) Softeners No. 1..... | \$ 1.50 | \$.050 |
| " " Blackhand..... | " 1.50 | " .050 |
| " " Jackson county..... | " 1.50 | " .050 |
| " " Lake ore and clades..... | " 1.50 | " .050 |
| Southern Coke, No. 1..... | " 1.50 | " .050 |
| " " No. 2..... | " 1.50 | " .050 |
| " " No. 3..... | " 1.50 | " .050 |
| CHARCOAL FOUNDRY..... | " 1.50 | " .050 |
| Lake Superior..... | " 1.50 | " .050 |
| Southern..... | " 1.50 | " .050 |
| Hanging Rock..... | " 1.50 | " .050 |
| CAR WHEEL AND MALLEABLE IRON..... | " 1.50 | " .050 |
| Lake Superior..... | " 1.50 | " .050 |
| Standard Southern..... | " 1.50 | " .050 |

| | | |
|-------------------------------|---------|---------|
| Hanging Rock, cold blast..... | \$ 1.50 | \$.050 |
| " " warm blast..... | " 1.50 | " .050 |
| Southern, cold blast..... | " 1.50 | " .050 |
| " " warm blast..... | " 1.50 | " .050 |
| IRON RAILS, AMERICAN..... | " 1.50 | " .050 |
| CAR WHEELS..... | " 1.50 | " .050 |

St. Louis Iron Market.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

ST. LOUIS, April 23, 1888.

The week has been an active one in negotiations, and a few round sales have resulted. Prices have got down very close to the low figures of 1886, and have reached the point where they are very burdensome to furnaces. There is some increase in production in the South, but Eastern and Southern demand readily takes the excess. We quote for cash as follows:

| | | |
|--|---------|---------|
| CHARCOAL FOUNDRY..... | \$ 1.50 | \$.050 |
| Missouri..... | " 1.50 | " .050 |
| Southern..... | " 1.50 | " .050 |
| COAL AND COKE IRON..... | " 1.50 | " .050 |
| Southern..... | " 1.50 | " .050 |
| Ohio Softeners..... | " 1.50 | " .050 |
| MILL IRON..... | " 1.50 | " .050 |
| Southern..... | " 1.50 | " .050 |
| CAR WHEEL AND MALLEABLE IRON..... | " 1.50 | " .050 |
| Southern..... | " 1.50 | " .050 |
| Lake Superior..... | " 1.50 | " .050 |
| Cornellville Coke, (East St. Lou's)..... | " 1.50 | " .050 |
| " (St. Louis)..... | " 1.50 | " .050 |

Chattanooga Iron Market.

Specially reported by LOWE & TUCKER, Brokers and Commission.

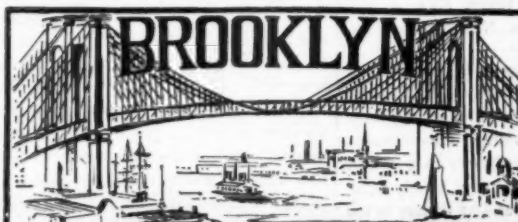
CHATTANOOGA, TENN., April 23, 1888.

The condition of general business is materially unchanged in all lines of trade. All the manufactures are running full with the exception of those that are manipulating iron. These may be said to be somewhat depressed. Pig iron remains practically unchanged, both in price and demand. Brands of foundry iron are slightly in demand over the ability of the furnaces to supply, and there is some delays being experienced by consumers in getting their wants supplied. In a few instances a small advance has been realized by the furnaces for prompt shipment of the grades, but as a general thing remain stationary, with plenty of low grades of iron in stock.

DIXON'S Silica Graphite Paint.

DURABLE AND BEAUTIFUL.
Unaffected by heat or cold, dampness, salt air, rust, or even acids. For smoke stacks, boiler fronts, tin roofs, or metal work, this Paint is far superior to anything made. For details send for circulars.

Joseph Dixon Crucible Co., Jersey City, N. J.



GENUINE RAW HIDE LACE LEATHER
HAS PHENOMENAL STRENGTH.
IT WILL NOT GET HARD. Try a sample side and be convinced.

SHURTZ BELTING
MANUFACTURERS OF
OUR BELTING
is tanned on the surfaces only; the
INTERIOR IS RAW HIDE.
Send for Our Valuable Book for Engineers and Belt Users. Free.
Agents in all Cities. Send for Trial Belt.
Address SHURTZ BELTING CO., St. Louis, Mo.

TO MAKE
BRIGHT, SMOOTH CASTINGS
USE
RADIANT
FACINGS
Also all other kinds of
FACINGS
and
Blackings
Plumbago
and
FOUNDRY
Supplies.
Fitzpatrick
& Smith Co.
Cincinnati,
OHIO.

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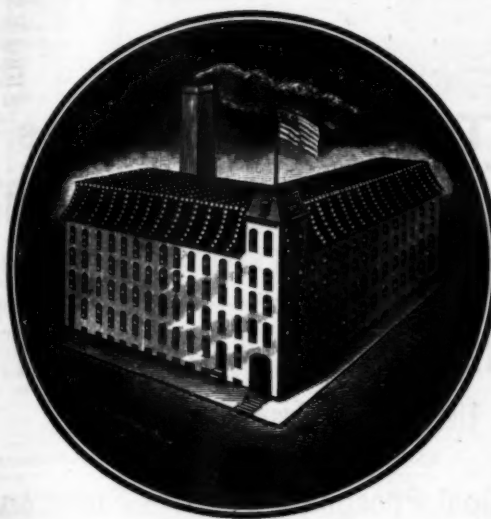
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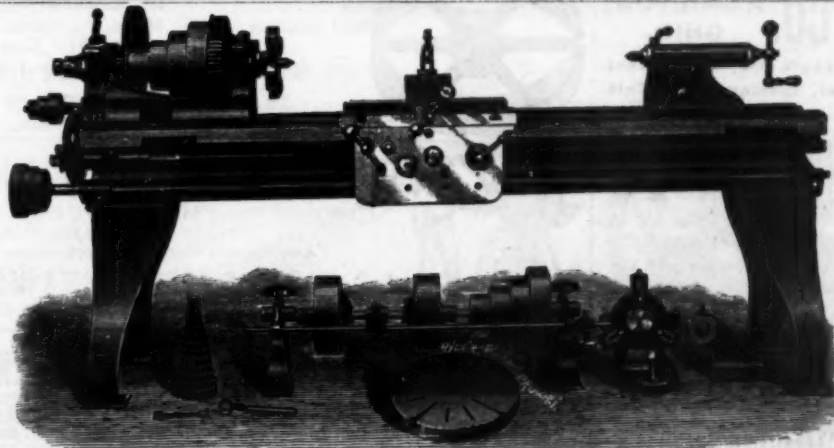
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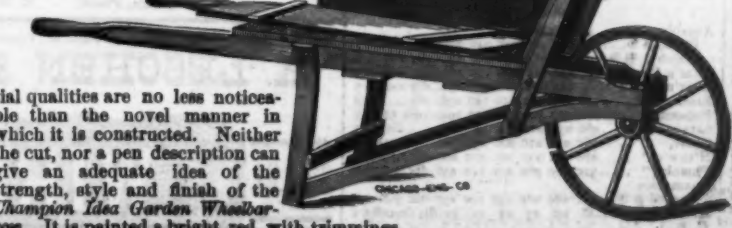


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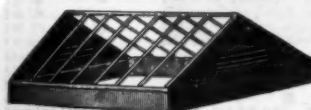
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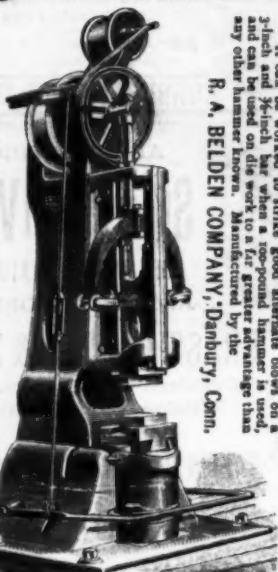
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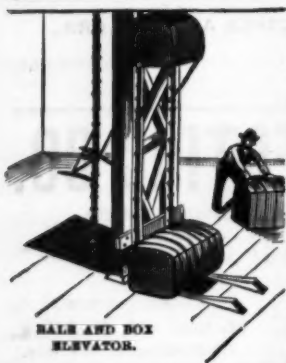
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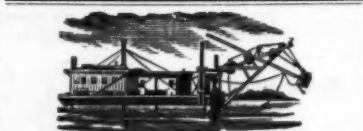


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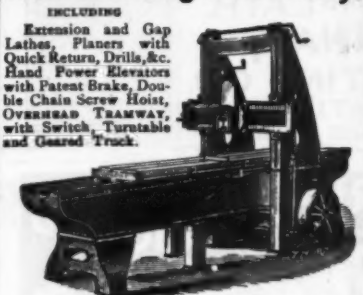
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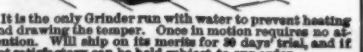
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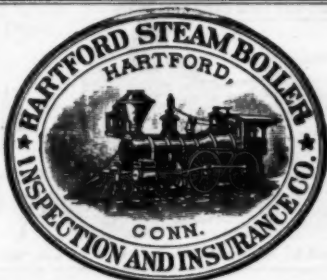
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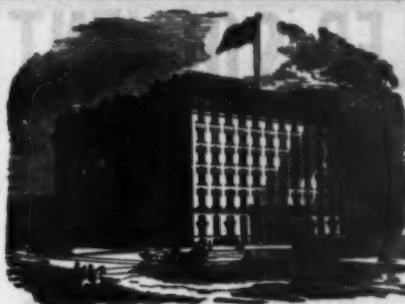
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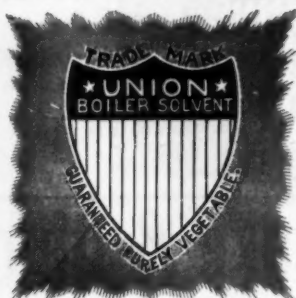
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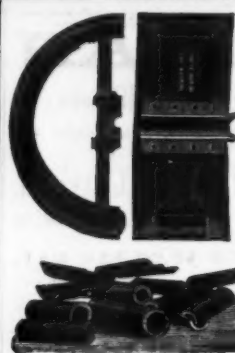


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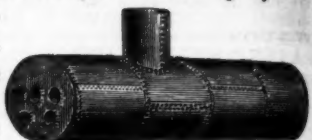
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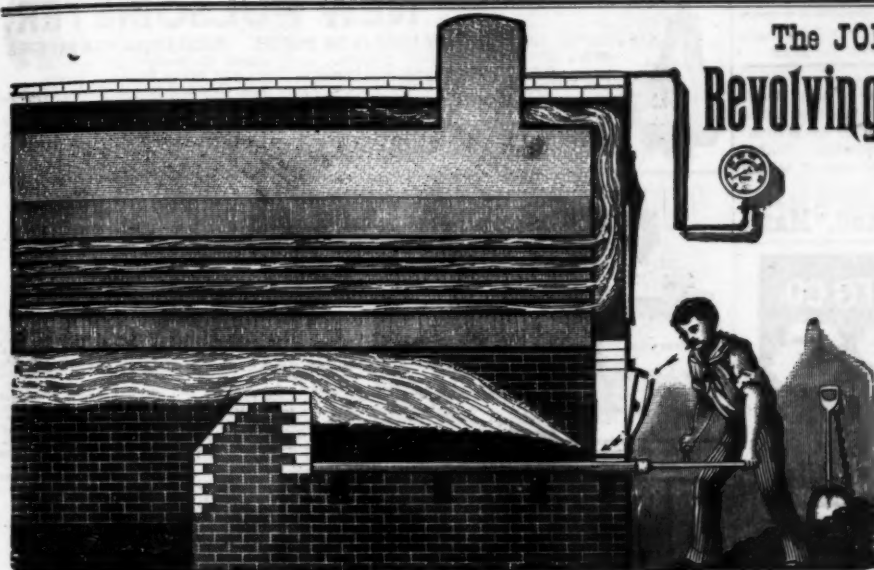
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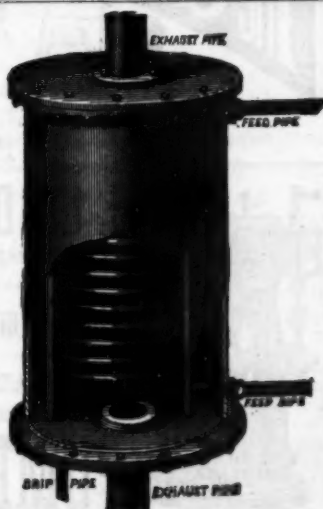
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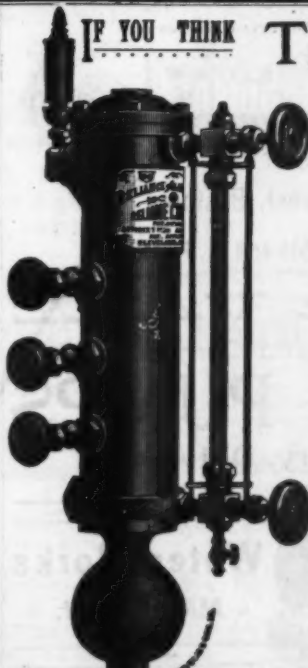
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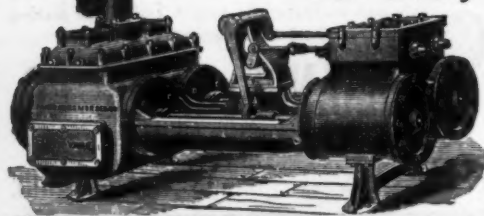
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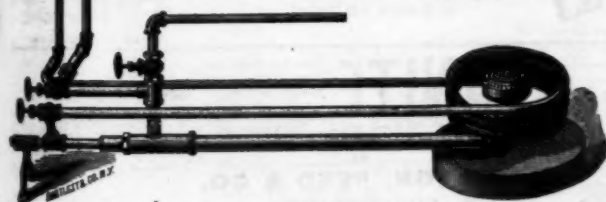
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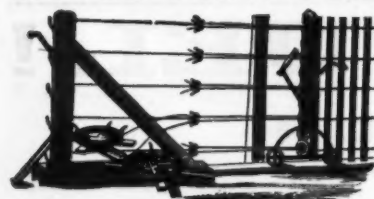
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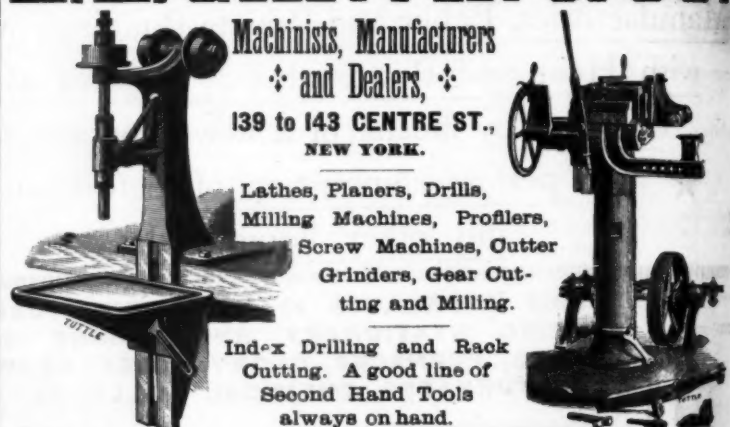
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